JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

THIRD SERIES

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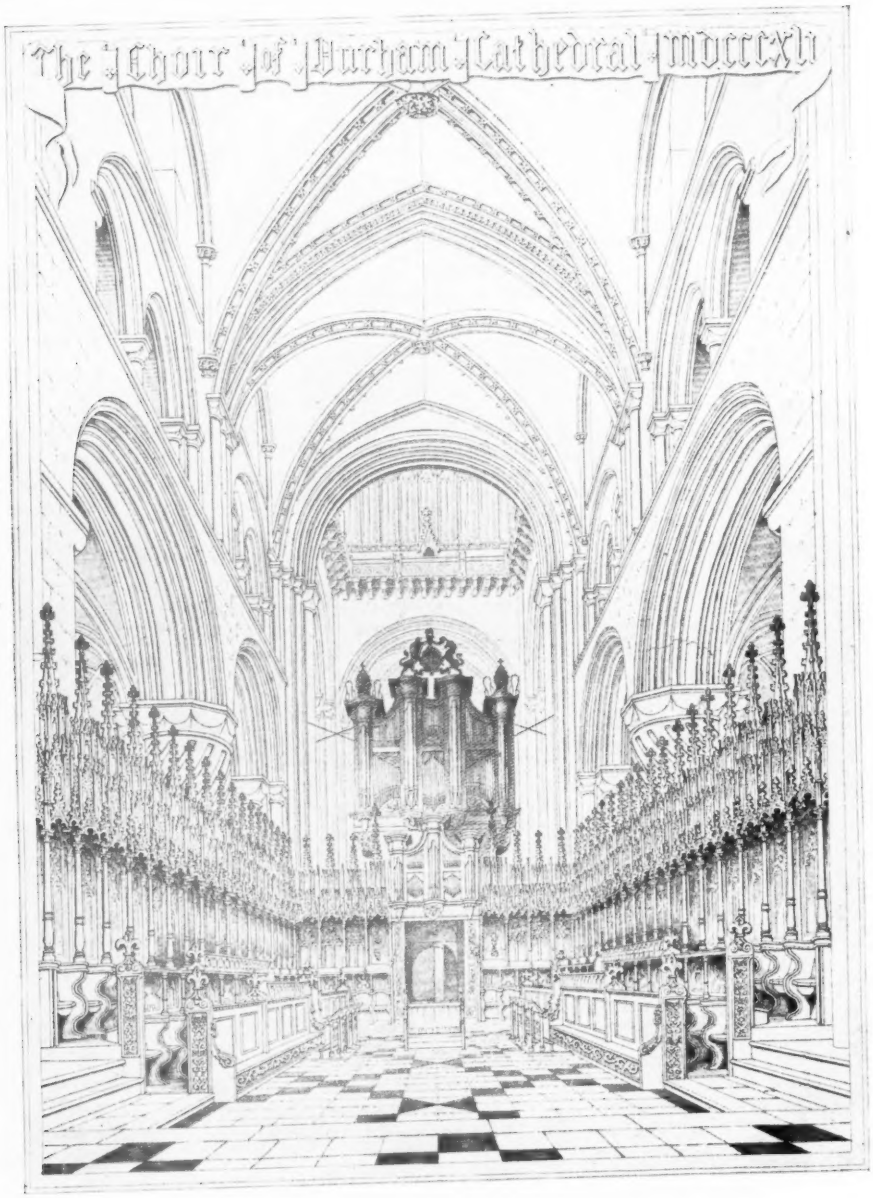


DURHAM CATHEDRAL
From Billing's Durham Cathedral (1843)
Showing the Father Smith organ case as seen from the choir
(see page 960)

JOURNAL OF THE
ROYAL INSTITUTE *of* BRITISH ARCHITECTS

VOL. 41. 3RD SERIES 11 AUGUST 1934 No. 18

Journal

His Royal Highness the Prince of Wales has accepted the Council's invitation to attend the Centenary Banquet on 22 November.

The King has been pleased to approve of the appointment of Mr. William Curtis Green, R.A. [*F.*], and Mr. Ronald Collet Norman to be Members of the Royal Fine Art Commission, in succession to Professor Stanley Davenport Adshead [*F.*], and Sir Walter Peacock, K.C.V.O., who have retired on completion of their terms of office, and of the appointment of Sir Alexander Gibb, G.B.E., C.B., M.Inst.C.E., to be an additional Member of the Commission.

The Building Trades Exhibition is to be held at Olympia this year from 12 September to 26 September, and Mr. Greville Montgomery [*Hon. A.*], the Director of the Exhibition, has generously offered to contribute two shillings to the Architects' Benevolent Society for every member of the R.I.B.A. admitted to the Exhibition on a special card which will be sent out with the JOURNAL of 8 September. We hope that every member of the Institute who can attend the Exhibition will make a point of doing so and will use the R.I.B.A. card to assure as big a contribution as possible to the funds of the A.B.S. The cards will be issued with the next number of the JOURNAL.

We are also glad to announce that the dance which was held at Olympia two years ago in aid of the Architects' Unemployment Relief Fund is to be given again this year in aid of the Architects' Employment Scheme, and that Mr. Greville Montgomery has again most generously offered to meet the cost of the dance so that the entire proceeds of the sale of the tickets will be devoted to the Scheme. The organisation is again in the hands of Mrs. Lanchester, the Chairman of the R.I.B.A. Social Committee, and we fully expect that the success of the last dance will be repeated. As the Architects' Employment Scheme is carrying on the work of the Unemployment Relief Fund and giving part-time emergency work to architects who are temporarily out of employment, we do not need to emphasize the "good cause" for which the dance is being given. We are sure it has the sympathy of all our members and we hope they will ensure a large attendance by coming themselves and bringing their friends.

A leaflet is enclosed with this number of the JOURNAL giving particulars of time and place. The dance will be held in the National Hall and the date has been fixed for Friday 21 September. A sit-down supper will be served at 8.30 p.m., and dancing will continue till 1 a.m. Tables may be reserved for parties of six or more if the order is received before Wednesday, 19 September. After Wednesday no reservations can be made. Tickets are £1 each (or 15s. if bought in numbers of three) and may be obtained from Mrs. Lanchester, Chairman, Social Committee, R.I.B.A., 9 Conduit Street, W.1, or from the Secretary, Architects' Unemployment Committee, 9 Conduit Street, W.1.

Two years ago, through the initiative of Mr. Phillips Dales [*F.*], of the Essex, Cambridge and Hertfordshire Society of Architects, Mr. Greville Montgomery instituted another very successful scheme of direct benefit to the A.B.S. This was the holding of an exhibition of architects' sketches which had been given to be raffled on behalf of the Society. There is to be another and similar exhibition this year. Any member of the Institute who has drawings which he can give for exhibition and raffle are asked to write direct to Mr. Greville Montgomery, 43 Essex Street, Strand. Formal "architectural" drawings are not so much wanted as the informal products of an architect's leisure, whether drawings of buildings or not. The chief objective, apart of course from the desire to make a good contribution through the scheme to the A.B.S.. is to have an interesting exhibition of drawings which will be worthy prizes in the draw.

During the Exhibition there is to be an R.I.B.A. Club Room at Olympia, where members can meet one another, rest and refresh themselves. This is a repetition of a scheme which was found acceptable some years ago and which we are certain will be welcome to members this year. Full details will be published later.

The Library has recently received, mainly through the good services of Mr. John Summerson [*A.*], a valuable accession from Lord Ravensworth, who has deposited on permanent loan a set of over fifty drawings of Ravensworth Castle, near Newcastle, designed by John Nash. The building of Ravensworth Castle began

about 1808 and some of the drawings are of this period. In general the drawings are of twofold interest; for one thing they display Nash's inexhaustible structural ingenuity (not always highly scientific), his fondness for cast iron construction and patent roofing materials; secondly they are annotated almost entirely in Nash's own hand, a fact which helps to dispose of the theory (for which there is no foundation) that Nash's share in the work which emanated from his office was small. Perhaps the most interesting thing in the collection is a portion of a letter from Nash to Lord Ravensworth and unintentionally preserved on the reverse of a sketch of a skylight. It evidently refers to Nash's unpopularity at the time when he and the Prince had been pushing the Regent's Canal Bill through Parliament. "The Government men were at last almost afraid to be seen with me—now it is over they are all congratulations—I told the Prince at dinner on Thursday last how shamefully I was left to myself . . ."

Ravensworth Castle as it stands has little to recommend it (much of Nash's work was replaced in Victorian times). It is now empty and probably to be demolished.

A recent purchase by the Literature Committee is worth noting here. This is of twelve late eighteenth or early nineteenth century books on domestic architecture which had been in the library of the late Sir Lawrence Weaver, which are fully recorded on pages 981–2. The number of books produced by the eclectic architects between about 1790-1830 to advertise their wares almost defies record. We must by now have most of them in the library, but more are continually turning up ; almost invariably they are beautifully printed and illustrated, and have entertaining almost ingenuously specious texts.

It would probably be generally agreed that one of the most obvious duties of the Institute Library is to form as complete a collection as possible of *English* architectural books. The library is more or less universally recognised as the national English architectural library and it is our duty to assure that the reputation is justified. The Literature Committee has always accepted its responsibilities in this light; it does not, because it cannot, attempt to buy every foreign architectural book that comes its way, but it does attempt to complete gaps in the collection of English books. As usual these periodical notes on the library end with a plea for the active help of members in enlarging the collection. Anyone who is interested should write to the librarian who will tell him how he can best further the library's development.

As a result of the note on William Burges in these columns a month or two ago the library has received a number of very interesting photographs of nineteenth-century architects. Mr. Samuel Kirkman, a grandson of S. S. Teulon, has given the Institute a delightful picture of Teulon, seated at a richly carved table reading a book with his tall hat beside him, somehow it all seems very appropriate. Mr. A. B. Hayward [*L.*] has given the Institute portraits of his father, C. F. Hayward and of Charles Fowler. The former is a magnificent example of Frederick Hollyer's photography. People sometimes think that photography has only become an "art" in the last year or so, since photographers have learnt to make use of all the possible atmospheric effects that can be obtained by clever camera work and have exploited the many and ingenious possibilities of designed distortion. This is by no means the case. It is doubtful whether there are any portrait photographers to-day who can better the straightforward excellence of Hollyer's photography, producing photographs which in themselves, as pictures, are perfect, and are no less perfect as portraits.

In connection with the exhibition of work done under the Architects' Unemployment Relief Fund which is now being shown at No. 7 Bedford Square, the Architects' Unemployment Committee would like to express their cordial and grateful thanks to the following donors whose gifts have reduced expenses of the exhibition to a minimum:—To the Building Centre who are paying half the cost of the exhibition; the Architectural Association who have given the premises where the exhibition is being held; to Messrs. Allom Bros., Messrs. Troughton and Young and the Company of Merchant Adventurers of London who have given the lighting fittings; the Electric Lighting Service Bureau for electric lamps; Messrs. T. Clarke and Co., for the electrical work; and Messrs. Jordon Gaskell for the printed slips.

As a result of the exhibition, an offer has been made by Mr. Leonard Bentall of Kingston to finance the completion of the survey maps of his neighbourhood, and when completed to arrange for a series of lectures on them at Kingston. The offer has been very gratefully accepted and it is calculated that the work will keep eight or nine architects employed for several months.

The picture at the foot of this page shows part of the decorations in the Institute Meeting Room for the Farewell Dance which was held on Monday, 16 July.

ORGANS AND ORGAN CASES*

BY S. E. DYKES-BOWER, M.A., A.R.I.B.A.

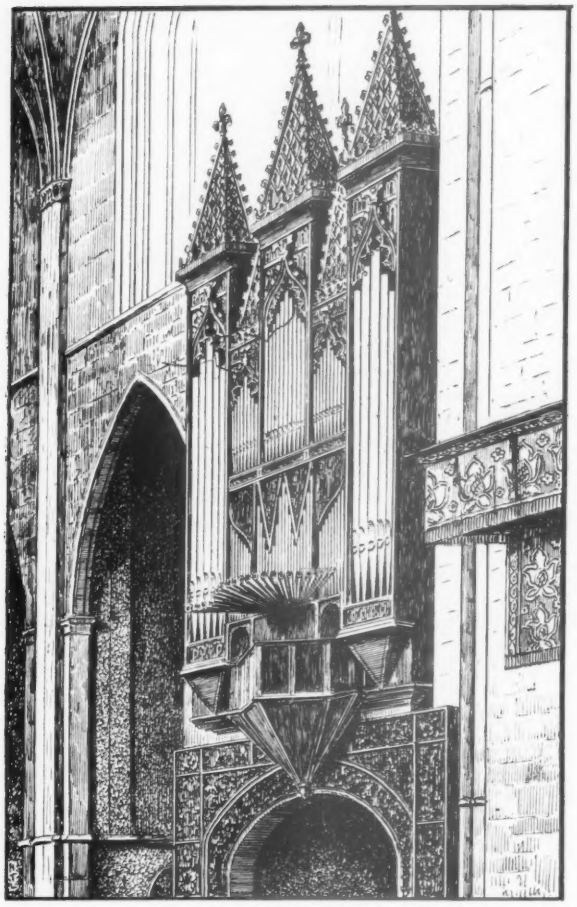
EVER since—if not before—that famous dispute between two great men, Sir Christopher Wren and Bernard Schmidt, over the organ in St. Paul's Cathedral, whereby Wren had to alter the design of his case and Father Smith had to put three stops not in the organ but in the vestry, architects and organists have tended to regard each other as natural enemies. Architects are said to forget that organs should be heard as well as seen; musicians that they must be seen as well as heard. In attempting to see how these conflicting attitudes may be reconciled, I propose to preface discussion of the main point at issue, the *position* of organs, with a brief summary of the history of organ-cases and the principles of their design.

The very early history of organs may be passed over quickly. The Pipes of Pan show, I suppose, the earliest application of the elementary principle of organ-building and it is from Greece that the organ is said to have first penetrated to other countries. It was natural that the Church should be quick to experiment with its possibilities. St. Jerome mentions an organ at Jerusalem with 12 brazen pipes, 2 elephants' skins and 15 smiths' bellows which, since it could be heard at the Mount of Olives a mile away, must have been a very loud instrument. Julianus, a Spanish bishop living in the fifth century, stated that in his time organs were numerous in the churches of Spain. Their introduction in England may have been as early as the seventh century but we do not hear much about them till the tenth century, when, in the person of Saint Dunstan, successively Abbot of Glastonbury, Treasurer of England, Bishop of London and Archbishop of Canterbury, we meet a notable ecclesiastic who was an organ-builder in his spare time. He built organs in both Malmesbury and Abingdon Abbeys as well as many other churches and convents. Some of these primitive instruments seem to have had copper or brass pipes fixed in gilt frames, but it is not very easy to visualize their appearance. The well-known representation of an organ in the Utrecht Psalter shows what is evidently a hydraulus or water organ; but as a picture it is chiefly interesting for the human interest of the little scene which it portrays. Two organists, exasperated at the interruption of their performance, are admonishing the four organ-blowers for having let the wind out. It may be asked, Why two organists and four blowers? If the organ built to the order of Bishop Elphege for Winchester Cathedral in 957 was at all typical, the answer would seem to be that both organ-playing and organ-blowing were strenuous occupations. Here is a description of this instrument taken from a Latin poem by a monk named Wulstan: "Such organs as you have built are seen nowhere. . . Twice six bellows are ranged in a row, and fourteen lie below. These, by alternate blasts, supply an immense quantity of wind and are worked by seventy strong men, labouring with their arms, covered with perspiration, each inciting his companions to drive the wind up with all his strength, that the full-bosomed box may speak with its four hundred pipes which the hand of the organist governs. . . . Two brethren of concordant spirit sit at the instrument and each manages his own alphabet." (Alphabet, of course, signifies keyboard, with the notes A, B, C, D and so on.) Not improbably the mention of two organists, however concordant their spirit, and, still more, the seventy strong men covered in perspiration, will cause you some misgiving; nor do I think such misgivings would be groundless. A further extract will make it clear that the organ was powerful without being pleasing. "Like thunder," it says, "the sounds batter the ear, so that it may receive no sound but that alone. To such an amount does it reverberate, echoing in every direction, that every one stops with his hand his gaping ears, being in no way able to draw near and bear the sound, which so many combinations produce. The music is heard throughout the town and the flying fame thereof is gone out over the whole country." Even with some allowance for the possibility that the monk

* Based on a Paper read to the St. Paul's Ecclesiastical Society.

The drawings by Mr. H. T. Lilley have been lent for reproduction by kind permission of the owner, the Rev. Andrew Freeman, of Standish, Glos.

The drawings on pp. 950, 954, 956 and 958 are reproduced from A. G. Hill's great work on Organ Cases and Organs of the Middle Ages and Renaissance. (1891.)



PALMA, MAJORCA
From the drawing by Mr. H. T. Lilley

Wulstan may have been given to exaggeration, there is proof enough here that not all old organs were, as some would have us believe, not merely small but sweet.

About organs in England from the Conquest to the Reformation, there is not much to say because not much is known. There are, of course, frequent references to them in the records of the cathedrals, such as The Rites of Durham, but these chiefly relate to their construction, tuning and repair. There is little of descriptive interest to tell us what they were like. Probably the smaller ones consisted of little more than a row of pipes standing upright on the rackboard in which they were placed and supported by a wooden band, a pair of hand-bellows being at the back. Some may have had a canopy of woodwork above the pipes.

For any direct evidence of what mediaeval organs were like, we must look to the continent. In the conventual church of St. Catherine at Sion in Switzerland, there remains a west gallery organ dating from about 1390. Its form is very simple—a straight front formed of two towers at the sides and a gabled flat between, the height being 12 feet 10 inches and the width 6 feet 2 inches. Shutters are attached to the sides and these are decorated with paintings on canvas, one having a white background, the other red. The upper stage of the case itself is painted blue, red and gold and the lower stage light green, with a dark green pattern and some red flowers upon it.

This is an isolated example. Spain can show at Salamanca a case of much the same size, perhaps even earlier in date in spite of being more developed in the treatment of the detail, and at Zaragossa, in the cathedral and in the church of San Pablo, two much larger organs which may well belong to the early fifteenth century. These two and the similar one in the cathedral of Palma, Majorca, are roughly 25 feet high and 15 feet wide and richly adorned with crestings and traceried pipe-shades. At Perpignan which, though now in France, used to be in Spain, we meet with an enormous organ built in 1490, 45 ft. high and 23 feet wide, containing 32 feet pipes in its largest* towers. It projects from the wall on one side of the nave and formerly had huge shutters to enclose the entire front.

In contrast to the southern Gothic school represented by these Spanish organs and the one notable Gothic case in Italy, San Petronio at Bologna, the organ at Amiens Cathedral deserves mention as a specimen of the northern Gothic school that flourished in northern France and Germany. The form is not dissimilar but the general character and the treatment of the detail are markedly different. In Germany such cases as Dortmund, 1480, and Strasbourg, 1497, are well known but by far the most famous is the vast organ in the Marien-kirche at Lubeck, built in 1504. This organ, not unlike Amiens on a very big scale, attains a height of 80 feet and a width of 40 feet—dimensions which become impressive when we remember that 70 feet is a good average internal height and 30 feet an average width for an English cathedral nave. Here again are 32 foot pipes in the centre tower—though that 32 feet was not the limit is proved by the records of an

* Even to-day there are very few 32 feet frontages in England.

organ of 1479 at Nuremberg having pipes 39 feet long.

It was naturally in Italy that the influence of the Renaissance first affected organ-cases. At Siena there are two famous organs both designed by Peruzzi; a small one in the Palazzo Publico and a large one in Santa Maria della Scala. The first dates from 1500 and seems to show a lingering Gothic feeling; the second dates from 1510 and is wholly classical in treatment. Both cases are elaborately painted, chiefly in blue and gold with a very sparing use of red and both are representative of the typical Italian case. Its essential characteristics are the strongly architectural form, the pipes being usually enclosed within a frame made by pilasters supporting an entablature. The fronts are kept flat and richly coloured; pipe-shades are absent and the pipes display their natural length.

If we now go back to Spain, we find in its earlier Renaissance cases the same flat fronts and the pipes showing their speaking length. But pipe-shades here are conspicuous and while the main character remains architectural, the form is more complex and imposing. How splendid the result could be is well shown by the organ of Barcelona Cathedral, 1549, and Tarragona Cathedral, 1563. This case, for the excellence of its design and the sumptuousness of its detail, is doubtless unsurpassed. Space is provided for a great number of pipes in compartments allowing for ample variation in size; the organ, as a composition, fills most happily the space it has to occupy and the treatment of the organist's gallery and the little projecting choir-organ is beyond criticism. The architect of this masterpiece was one of the canons of Tortosa, a cathedral which itself possesses a smaller but admirable case on the same lines.

Whereas in Italian organs diapason and mixture tone was predominant, since the Ambrosian rite did not allow reeds, in Spanish organs there is a preponderance of reed tone which finds fitting expression in the batteries of projecting reed-pipes that stand out just over the console and impart to Spanish organs such a striking and impressive aspect. This horizontal position was useful besides being ornamental because, by preventing dirt from falling into the pipes, it helped to maintain them in tune.

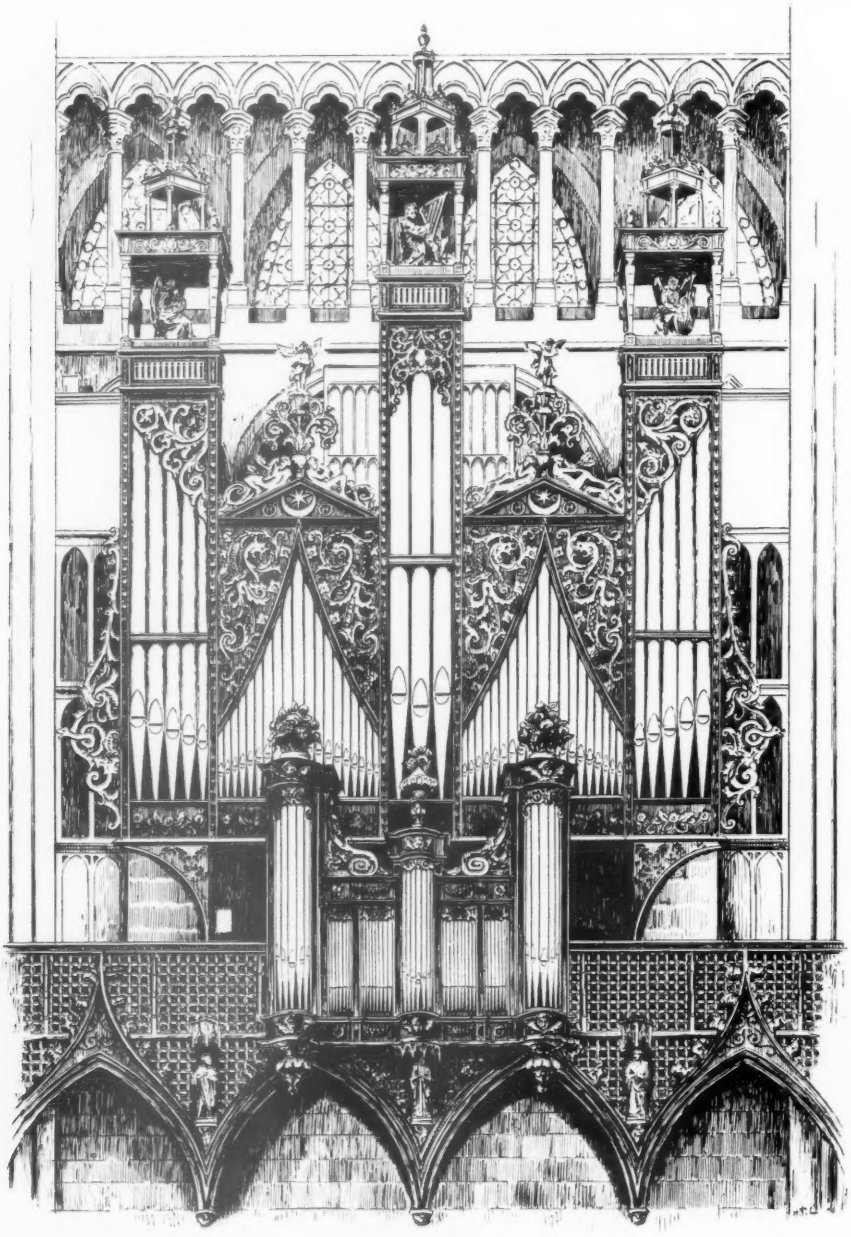
Tarragona represents the zenith of organ-case design in Spain, but a word must be said of the great organ in Seville Cathedral. Here, as is fitting in so vast a building, are two huge organs facing each other across the quire and mounted on galleries of red marble. Each case has two fronts, one to the quire and one to the aisle, and all four fronts have positive organs. The wood is dark cedar and the pipes of tin, mostly left its natural colour but picked out in places with gilding. The old case (for one is a nineteenth-century reproduction) dates from about 1600 and the difference in treatment from Tarragona is noticeable. Instead of being flat, the front is broken up with semicircular towers and smothered in lavish and highly modelled carving. Surmounting the case is an astonishing assemblage of figures, quite out of scale with everything below, but being only seen so high up, perhaps not ineffective. What seems to me fine about this case is its quality of exuberant "bravura." It looks like the king of instruments and gives an impression of great power in reserve. Significantly enough the builder who erected the modern half of the instrument confessed himself unable to produce anything like the old. "He quailed," he said, "at its lion's roar."

The influence of Seville may be seen elsewhere. A much smaller organ in Santa Cruz, Coimbra, Portugal, certainly shows it in its choir organ while, on the other side of the Atlantic, it appears on a grandiose scale in the great organ in the cathedral of Mexico City.

If now we return for a moment to France, it is surprising to find how early the Renaissance affected organ case design. In St. Maclou, Rouen, the organ was actually being built at the same time as the famous Gothic staircase to the organ-loft, 1518-1521, and each is as admirable in its own style as the other. It is only regrettable that this case has since lost all the colour decoration designed for it by Jean-Gougeon.

Passing to Germany by way of Holland gives opportunity to pause before the superb organ of Bois-le-Duc. Built in 1625-30, it is, for perfection of design and wealth of detail, the equal of Tarragona. It stands at the west end of the church, is 40 feet wide and reaches a height of 100 feet above the ground. It is said to have been the work of an artist from Cologne, but the gallery in which it stands bears a strong resemblance to Elizabethan work and is the product of an Englishman, Francis Symonds. What must the appearance of this church have been when its splendid marble rood-loft, turned out in the last century because it was not Gothic and now in South Kensington Museum, stood in its original place carrying a second organ of similar workmanship?

If Germany can show nothing quite so overwhelming as Bois-le-Duc, it offers an abundance of cases of pre-eminent merit. That city of organs, Lubeck, provides in the church of St. Giles what is



AMIENS (1429)
From the drawing by Mr. H. T. Lilley

possibly as good an example as any. It embodies all that is best in countless lesser cases throughout the country, resembling it in character and detail. Yet curiously enough it has a close rival in Italy, in the church of Santa Maria di Carignano at Genoa. This noble organ, dating from 1660, is quite unlike the ordinary Italian case. Italian artists worked upon it, but its designer was a German and it is clearly German in feeling. In spite of a front broken up into semicircular and V-shaped towers, it is equipped with folding shutters, and the appearance of these, shaped to fit over them, gives it a singular grandeur.

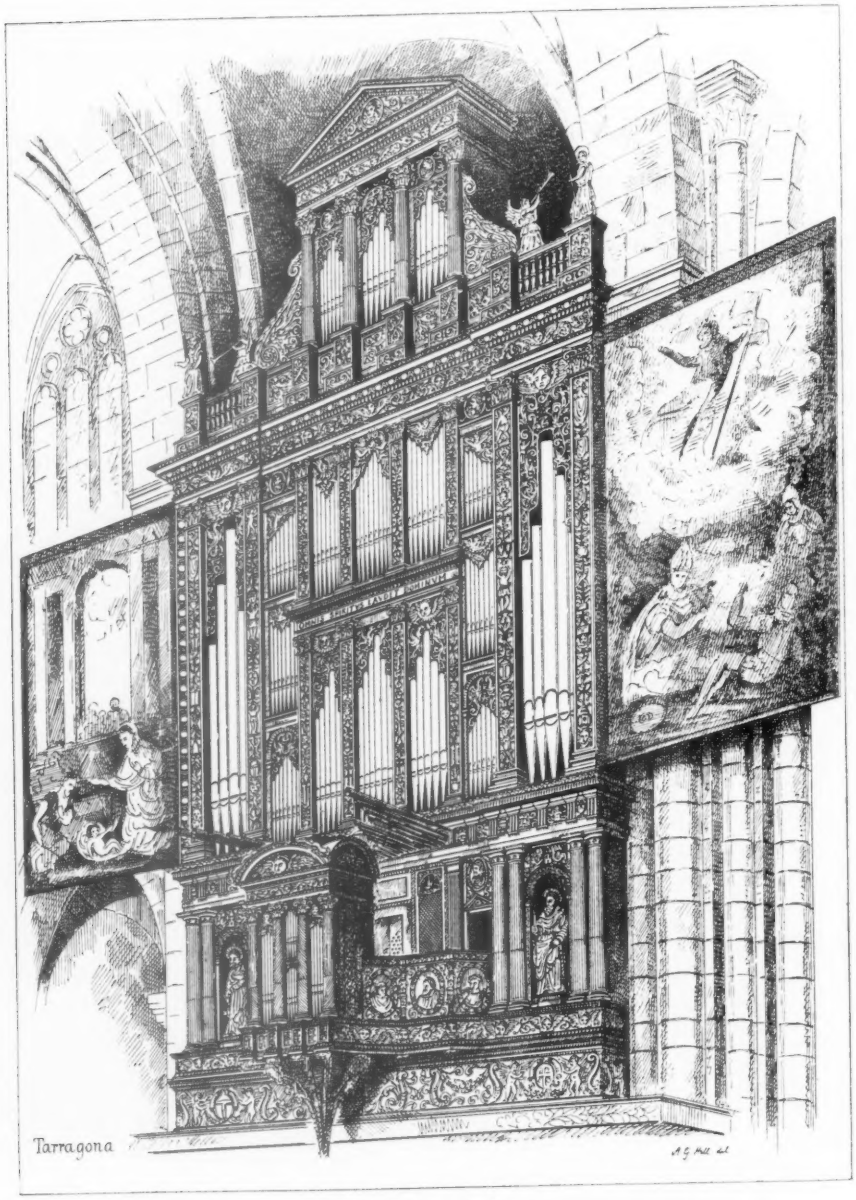
To continue this survey over further countries would take too long. It must suffice to say that during the seventeenth and eighteenth centuries the design of organ cases in Europe, excepting Italy, tended to assume the same characteristics and the type distinguished by round and V-shaped towers, having classical cornices and richly carved pipe-shades, attained universal acceptance. With national variations in minor details, we find it in England, France, Germany, Austria, Spain, Holland, Belgium, Switzerland, Portugal, Sweden, Denmark and Russia, while in the new world it appears in the French Canadian churches of Quebec and the earlier Colonial churches of America.

It is time now to say something of England. We possess nothing so imposing as some of the achievements of other countries, yet the English tradition of organ-case design has a modest charm of its own and, on a small scale, has produced many works of great merit and beauty. Unfortunately not a single early Gothic case survives in England, for though there is one pre-Reformation organ, that at Old Radnor in Wales, dating from about 1500, its detail and ornament are far more sixteenth than fifteenth century in feeling. It stands in a class by itself because, in its *form*, it does probably represent a typical pre-Reformation organ.

If we compare it with, for example, the little choir organ of Gloucester Cathedral, 1579, or the yet earlier case, 1571, now at Appleby, but which used to be in Carlisle Cathedral, this difference in form is very noticeable. In all essentials these latter belong to the common European tradition of Renaissance organ-case design.

By an Act of Parliament in 1644 all organs in churches were ordered to be destroyed, though a few escaped and still remain; organ-building however was for sixteen years at a standstill. The Restoration proved the signal for a great burst of activity and the next hundred years became the golden age of organ-building in England. Such men as the Dallams, Preston of York, Thamar of Peterborough and Lancelot Pease of Cambridge came into their own, and we can judge the standard of work of which they were capable by the organ in Exeter Cathedral, 1665, by John Loosemore of that city. The pitch was queered all too soon for these worthy provincial builders by the arrival in England of two rivals from abroad. After working in France for some years Thomas and Renatus Harris returned to England, while from Germany came Bernard Schmidt, commonly known as Father Smith. Smith and Harris were quickly dividing the best commissions between them. Father Smith secured, to name just a few, the cathedrals of St. Paul's, Durham, Chester, and Christchurch, Oxford; Trinity College, Cambridge, both University churches, and numerous college chapels; the Temple Church, Eton College Chapel and such London churches as St. George's, Hanover Square, St. Clement Danes and St. James, Garlickhythe. Harris did almost as well with Salisbury, Gloucester, Worcester, Chichester, Bristol and Newcastle Cathedrals and numerous London churches such as St. James's, Piccadilly, St. Lawrence Jewry, and St. Sepulchre's, Holborn. Father Smith excelled most, perhaps, at four-towered cases which Harris never attempted; these works have a dignified stateliness that is beyond praise. Harris was rather more erratic, but his best designs have a liveliness and grace that prove him, in my judgment, fully the equal of his rival. As to which was the finer artist is simply a question of personal taste.

To some extent Smith and Harris may be said to have founded a school of organ-case design, for, after their deaths, a number of builders continued to turn out excellent work. No one of them rose to special eminence but their joint efforts served to enrich English churches with comely, well-proportioned organs that rarely fell below a high standard of merit. Such men were Schrider, the son-in-law of Father Smith, Gerard and Christian Smith, his nephews, Richard Bridge, Abraham Jordan, Schwarbrick, Byfield, Snetzler, England, Avery and Green. Typical organs of these men and their time are Christchurch, Spitalfields, 1731, by Bridge, showing the ogee curve on plan and in elevation which this builder much favoured; St. Leonard's, Shoreditch, 1757, a later case also by Bridge; St. Mildred's, Bread Street, by England, clearly modelled on Father Smith's case in St. Paul's; St. Andrew-by-the-Wardrobe, a typical plain but satisfactory case; St. Botolph's, Aldersgate, by



TARRAGONA (1563)

Samuel Green, 1778, in which pipe-shades have given way to delicate festoons; and Clapham Parish Church, in which the influence of Adam is faint but unmistakeable.

Of organ-case design in the nineteenth century there is a very different story to tell, but at least of its first quarter something favourable can be said. While the high standard of eighteenth century work was fast dying out, small organs continued to be made which for their excellent joinery deserve credit. Many of those that betray the influence of the Greek Revival are pleasing in an unpretentious way, while by no means all those in Churchwarden Gothic are contemptible. In fact it is rarely that small organs of this period are definitely ugly; it is the larger organs, tricked out with bad Gothic detail, that are obvious failures. Yet occasionally some one of these possesses a certain charm and the west end organ at Wymondham, Norfolk, and the case for Lincoln Cathedral, designed by Willson in 1826, may be mentioned with approval.

By the beginning of Queen Victoria's reign, that invaluable safeguard, tradition, was virtually extinct. The various attempts to make organs look like something else—chantries, tabernacles and even tombs—were gradually abandoned and the organ degenerated into a mere collection of pipes held together where necessary by wood or, worse still, iron. Sir John Sutton and Pugin strove by precept and example to mitigate the evil, but with how little success is all too apparent even to-day.

Among the early Gothic Revival architects, Sir Gilbert Scott was one of the few to take organ-case design seriously; I cannot recollect, though I may be wrong in this, a single attempt at a case by either Street or Butterfield. Some later architects did better, and Pearson's cases in Westminster Abbey, Dr. Hill's cases at Peterborough, Chichester and Beverley Minster, numerous cases by Bodley and Garner, Kempe and Temple Moore, not to mention various living architects, demonstrate that the art of making an organ beautiful, though rare, is not obsolete. Sir Thomas Graham Jackson holds an honoured place among those who excelled particularly in Renaissance designs; it would be hard to conceive of anything more felicitous than his organ in the Sheldonian Theatre, Oxford.

Let us now turn to the Design of organ-cases. The architect of to-day may complain with some truth that he rarely gets the chance to spend enough money and that in consequence anything comparable with the sumptuous productions of the past is out of the question. An inexpensive case however can be pleasing. It is so often an unreasoning insistence upon the woodwork being of best English oak that is the cause of lost opportunities; a painted deal case might be no more costly and yield far more effect. Most churches need colour and particularly in old churches, where there is old woodwork in pews or screens, a modern painted case is likely to look far more satisfactory than one in which the new woodwork suffers by comparison with the old. Might we not do well to pay more attention to the Italian model? Its simple form, the absence of pipe-shades, the exposure of the natural length of the pipes and the decoration in colour all suggest directions in which economy might be practised without detriment. Economy, after all, except where money is at the discretion of an artist, acts as a wholesome discipline and even in earlier times the fact that it was not always necessary led to inappropriate extravagances. Organ builders could not refrain from introducing elaborate but irrelevant contrivances and in 1535 we are told by a certain Doctor of Physic, Andrew Borde, in his "First Boke of the Introduction of Knowledge" of an organ in Gascony "the fairest and greatest payer of orgyns in al Crystendom, in the wyche orgynes be many instruments and vyces, as giants heds and sterres, the which doth move and wagge with their iawes and eyes as fast as the player playeth." In Spain it was a common practice to adorn organs with grotesque heads which, when acted upon by the blowing mechanism, put out their tongues; according to one account these tongues "lolled out of their mouths to an exaggerated extent."

Dr. Burney relates the curious ornaments of the organ in the Garrison church at Berlin. "At each wing is a kettle-drum, which is beat by an angel placed behind it, whose motion the organist regulates by a pedal; at the top of the pyramid, or middle column of pipes, there are two figures, representing Fame, spreading their wings when the drums are beat and raising them as high as the top of the pyramid; each of these figures sounds a trumpet and then takes its flight. There are likewise two suns, which move to the sound of cymbals, and the wind obliges them to cross the clouds; during which time two eagles take their flight as naturally as if they were alive."

Sometimes too these devices took a musical form. An organ presented by Queen Elizabeth to the Sultan of Turkey in 1599 contained 'a drum,' 'a nightingale,' and 'a shaking stop' (doubtless the indispensable 'tremulant'). Although playable from

ZARAGOSSA CATHEDRAL, SPAIN
From the drawing by Mr. H. T. Lilley

a keyboard, this organ could also be played by clockwork which, when once wound up, took six hours to run down. History does not record whether the Sultan considered this an advantage.

Only two principles seem to me to be of general application in the design of organ-cases. The first is that the top line of an organ should never consist of the stepping formed by pipes of uneven length. If there is a cornice, the pipes must not project above it; if there is no pipe-shade, the pipes must be enclosed in some frame. All old cases seem to conform to this principle and it is so obvious that there is no need to dwell further upon it. Equally obvious is the second principle, that the upper stage of an organ, containing the pipes, should overhang the lower, at the sides if not also in front. The lack of such a projection does not seem to be detrimental in some of the flat Spanish and Italian cases, but elsewhere it is a defect and those numerous cases in England in which, through subsequent enlargement of the lower stage, it has been lost, suffer very much as a result. It is this more than anything else that mars so many of our later eighteenth century cases.

For the use of shutters there is such excellent precedent that it is strange to find them neglected. It is true they were originally intended to serve a practical purpose by keeping the dust out but their decorative merits alone surely justify their retention. In some churches to-day the organ is not used at all during Lent and this would be a suitable opportunity to close them. In country churches too where the organ is not used during the week and the heating is turned off, I believe that to be able to close the organ might be beneficial. Possibly they might be made to assist acoustically when open. It is interesting to note that in Italy artists of the first repute were engaged to paint such shutters; Holbein, Carlo Urbino and Paolo Veronese were employed in this way. We may note also that though both sides were painted, the most important subjects were almost always on the inside, which seems to indicate that the shutters were usually kept open. It is curious that though the scale of the paintings is nearly always far bigger than that of the detail of the carving of the case, the effect is rarely unsatisfactory.

Even when shutters were absent, it was not unusual to enclose the front of an organ with a curtain. At St. Thomas's, Salisbury, there is an item in the accounts for 1571-2 recording the expenditure of twopence for a "lyne to drawe the curteyn afore the fronte of the organes."

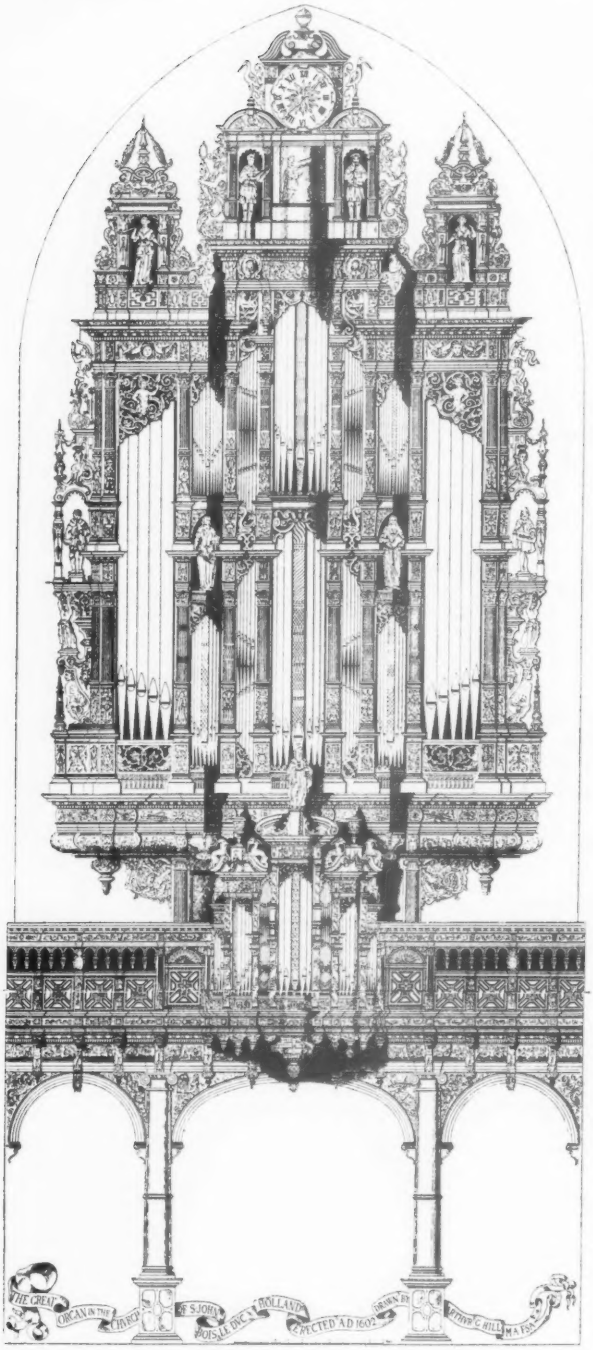
Occasionally the organ was surmounted by a wooden tester to act as a sounding board. Instances of this occur at Wesel, near Cologne, and Metz, in Germany. Possibly in churches with faulty acoustics such an expedient might still have its uses.

One of the commonest causes of that stiffness which spoils many otherwise good cases is that the mouths of the pipes in each tower and flat line up at the same level. It is important to avoid this, and, if possible, to incline the mouths in an opposite direction to that of the pipe-shades.

If projecting reeds on the Spanish model are to be used, they should not be at the top of the case. The bad effect of this is very evident in the otherwise fine Snetzler case at Ludlow. Inverted pipes have been revived in some very modern organs abroad, but though there is precedent for it in such cases as Perpignan and Bois-le-Duc, the practice is illogical and best avoided.

Old organs often had plain burnished pipes, and in mediæval cases the custom was doubtless to leave the pipes their natural colour and reserve all decoration for the woodwork. The effect of this can be very good. But with Renaissance cases I am by no means sure that this principle is binding. It is a significant fact that the oldest Renaissance cases we have in England—Gloucester choir case, Christ's College, Cambridge, Finedon, Framlingham and Stanford-on-Avon—show original painted pipes. The main Harris case at Gloucester of 1665 also has painted pipes, while Father Smith's organ at Durham is known to have been specially gorgeous on account of its diapered pipes. In my opinion nothing could be more delightful than the Gloucester painting, which is not merely admirable in design and colour but imparts a subdued richness beside which even so fine a case as Exeter seems cold. I think therefore that where funds permit of its being done well, the painting of pipes is not to be discouraged. The alternative of gilding is nearly always satisfactory and the contrast of gilt pipes with dark oak woodwork, as at St. Paul's and King's College Chapel, always looks well. At Durham during the eighteenth century it was the custom to wash down Father Smith's pipes once a year with strong ale, which apparently gave them the appearance of having been varnished.

There is one other treatment of the pipes which, in spite of its decorative value, has gone entirely out of use. Embossing was practised everywhere from quite an early date and embossed pipes must formerly have been as common as now they are rare. In the articles of agreement between Robert Dallam and the Dean and Chapter of York for a new organ in



Bois-le-Duc, France
(1625-1630)

1632 is an item "two open diapasons of tynn, to stand in sight, many of them to be chased." Often as at Bois-le-Duc the centre pipe of a tower was embossed. By the loss of their embossed pipes the organs at Exeter and King's are very much the poorer, but at least we are fortunate to possess in England what must be one of the best examples of the art existing. This is the so-called Milton organ in Tewkesbury Abbey, formerly at Magdalen College, Oxford and dating from about 1580. Here are pipes beautifully embossed to a variety of different patterns.

This organ exemplifies also another factor of great importance in design—the taper of the pipes. The taper of these Tewkesbury pipes is of perhaps exceptional length, but it is well suited to the rather slight character of the cornices and pipe-shades, and contributes to the graceful appearance of the case.

A small point to which attention might more often be given is the shape of the mouth and lips of the pipes. On the continent a semicircular shape was much favoured in the fifteenth century and a pointed leaf shape in the sixteenth and seventeenth. This latter was used by Father Smith, though he occasionally employed two different shapes in the same organ. Harris used as many as seven, apparently according to the whim of the moment, and also combined two in one organ. For his larger pipes he seems to have preferred the rounded form, which is more or less general in France. One pretty little device employed in England in some seventeenth century cases was a punched-out projection or nail head just over the apex of the leaf.

I will resist the temptation to dwell on other details, such as the lettering of draw-stops, in order to delay no longer discussion of the position of organs.

I have devoted attention so far to the history and architecture of organ cases because it is important that one thing at any rate should be clear. There is no need or excuse for organs being ugly; in so far as they mostly are extremely ugly, we have only ourselves to blame. First of all we ceased to build organ cases. Then we said the organ had become too unsightly an object to be allowed that prominent place to which architecturally, musically and acoustically it is entitled. We therefore stowed it

away, usually in a chapel at the side of the chancel, where it has no chance to be properly heard, thus making its enlargement imperative. Now, having forgotten that organs ever were beautiful, we talk of them as eyesores and overgrown monsters of which the less seen the better. We are actually so bankrupt of invention that when, as at Canterbury Cathedral, the whole of a fine instrument is hidden away in the triforium, with not a pipe showing, we congratulate ourselves on a triumph of ingenuity. No doubt those who delight in this kind of conjuring must find much to admire in those cinema organs where the sound comes out through a grating and the organist comes up through the floor.

In a recent correspondence about organs in *The Times* two remarks were made which, just because they voice such a typical attitude, seemed to me to possess a gloomy significance. "Organs," one writer informed us, "are a necessary nuisance"; "organ cases," another declared, "are never beautiful." It is not necessary to refute utterances like these, but it *is* necessary to point out that while such counsels of despair prevail a solution of the problem of organs in churches is not likely to be found.

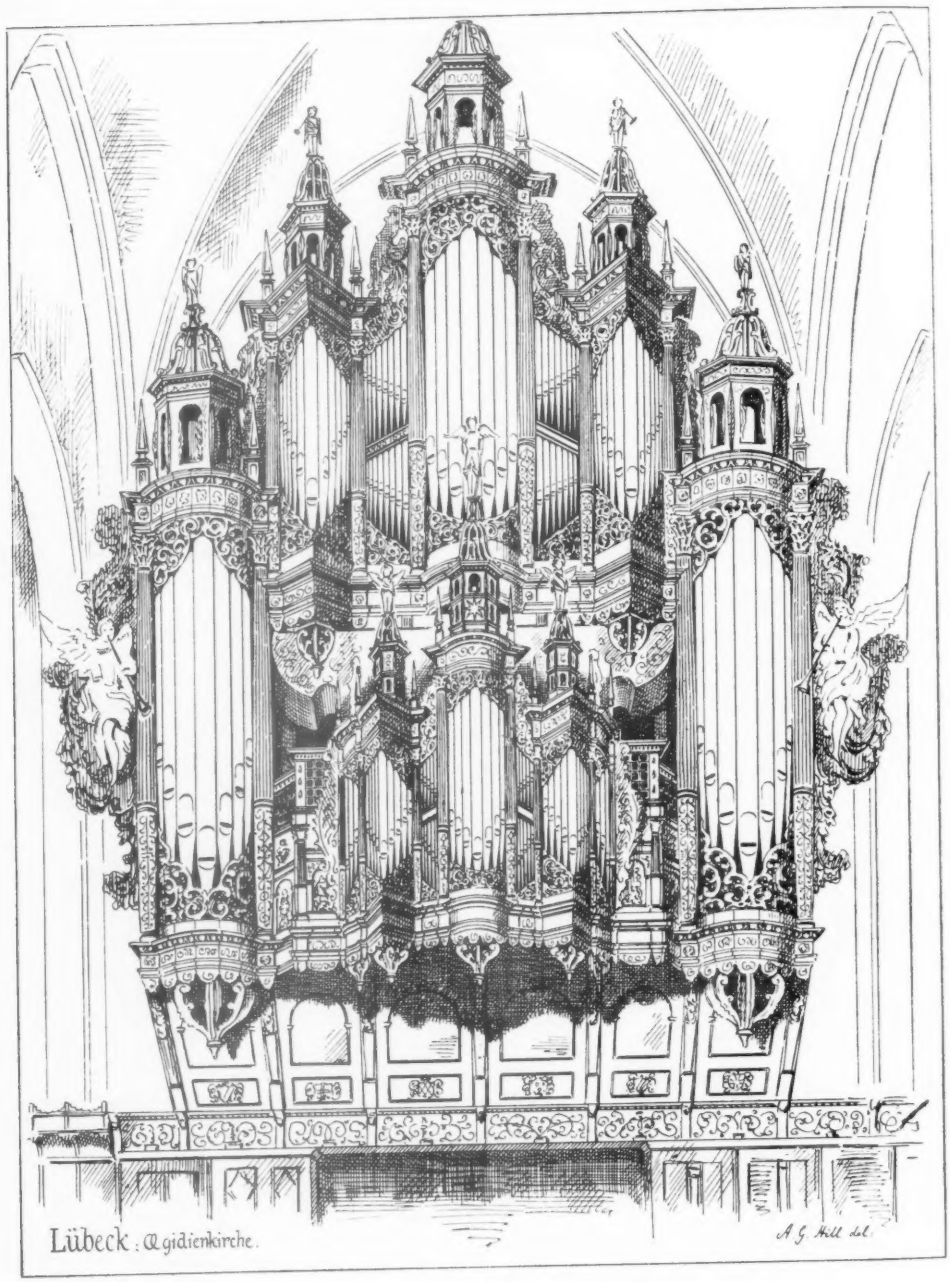
Let me deal with some practical considerations. One general recommendation is obvious. Provision for a case, properly designed by an architect, should form an indispensable part of any scheme for a new organ. A definite part of the money available should be set aside for this, even at the cost of a smaller instrument.

At first sight the very small church may seem to present the most difficult problem. But the limitation in size is sometimes a help rather than a hindrance, because it rules out so much. The chapel by the side of the chancel that too often becomes an organ chamber probably does not exist, while the fact of the building being small makes the west-end position suitable, since it is not too far away to be inconvenient. Often the west end offers a blank wall or a ready-made space under the tower; but sometimes a small organ may be effectively corbelled out from the wall of nave or chancel. Pugin's case at West Tofts may be cited as an example. Occasionally there is room for it over the chancel arch. If space is very restricted, the Positive organ, which has no pedals but provides real organ tone, may well be used. The little German positive organ in the South Kensington Museum, as well as many examples abroad, shows how delightful an object a small organ of this kind can be made.

It has to be recognised however that there are churches which, for one reason or another, hardly admit of an organ at all. In such cases there seem to be two alternatives and the choice ought to be governed by the acoustic properties of the building. Every church is to some extent an instrument in itself and its particular tonality, if wisely exploited, may be turned to advantage. Thus in a church of exceptional resonance such as is sometimes met with a reed organ might sound so well as to be an efficient substitute for the ordinary pipe organ. There is a model of two-manual reed organ that looks exactly like the console of an ordinary organ and is quite inoffensive. I mention this because the harmonium is usually a most objectionable piece of furniture. Normally however the second alternative, that of a piano (preferably a grand piano) is likely to be better. A sensibly designed piano need not be unpleasant to look at and most musicians would agree that as an instrument it is much more suitable to the accompaniment of hymns and psalms than the so-called American organ. It permits of a clear and decisive rhythm, and anyone who has heard one used in churches or cathedrals during the rebuilding of an organ can testify that it is capable of supporting congregational singing. At such a church as St. Mary Redcliffe, Bristol, a grand piano is now as much part of the musical equipment as the organ; the organ console and piano stand opposite each other in separate enclosures on either side of the quire. The piano moreover offers one other advantage not unworthy of mention. Having neither pedals not stops, it provides nothing to distract the less experienced type of organist, necessarily to be met with in country churches, from the all-important duty of playing the right notes.

The suggestion sometimes put forward that the old and picturesque village orchestra should be revived seems to me impracticable. In any one village it would be rare to find players of the right complement of instruments and for scratch combinations the music would need to be specially scored. The absence of one player might involve the omission of one vital part in the harmony, with very unpleasant results for the listeners, and the ability to play, say, the violin, it is so often forgotten is no guarantee of being able to play it in tune.

About organs in larger churches it is possible to say little, because every case must be decided on its merits. But at least an organ should not obscure the architectural form of the building by occupying transepts, chapels or aisles except when it is



St. Giles's, Lübeck

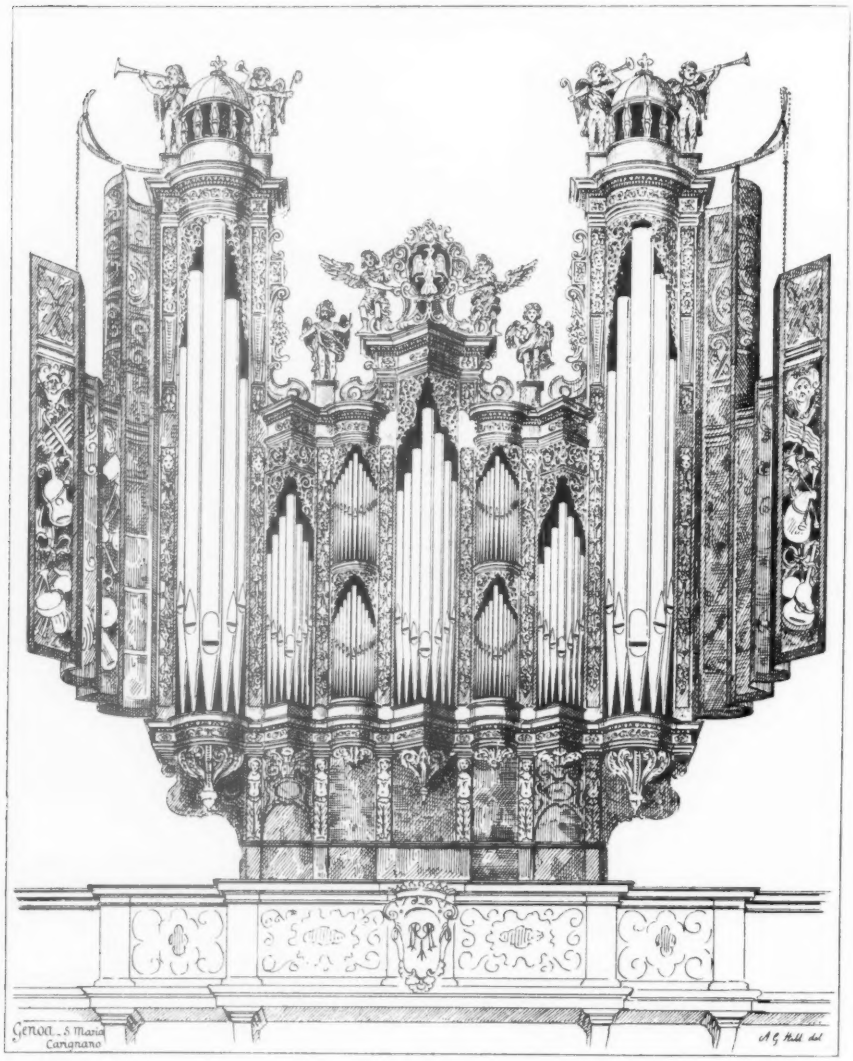
absolutely unavoidable. Probably the west gallery is likely to be the most normally satisfactory position. The objection that is often brought against it is that it leaves too great a distance between organ and choir. A detached console however to some extent mitigates that difficulty. On the other hand the choir might themselves be transferred to the west gallery or below it, the gallery being particularly good in that it brings the choir under the immediate control of the organist and, by raising it up, is acoustically helpful. The convention that choirs must sit in the chancel has acquired a quite unjustified authority and in many, if not most, churches it would be better in every way to bring them out into the nave.

What is indefensible is to subordinate the right solution architecturally to considerations, often only temporary, for suiting the inclinations of the choir. The simplest and most obvious solution is usually the best and any elaborate expedients such as dividing the organ to have an accompanying section near the choir and another section elsewhere are, except in very large churches, to be deprecated. It is hardly necessary to remark that there are strong objections to altering the fabric of old churches by throwing out organ chambers and structural changes of the kind.

There is no need to speak of modern churches. The co-operation between organ-builder and architect which ought to exist over the placing of organs in churches old or new, should always make possible a right arrangement. I will only quote here some words of Dr. Albert Schweitzer in his book, *My Life and Thought*, which, since they hold good of both churches and cathedrals, are applicable at this point. First as to position. "An organ," he writes, "standing on the ground never produces the same effect as one which delivers its sound from a height. From the former position the sound is hindered in its expansion, especially if the church is full. What a number of organs, good in themselves, and especially in England, are unable to produce their full effect because of their position in the chancel! . . . In recent times architects and organ builders have begun to take advantage of the abolition of the distance difficulty by electric connection between keys and pipes, to split up an organ into parts which are fixed in separate places and sound simultaneously though played from a single keyboard. Effects made possible by this arrangement may impose on the crowd, but the work of an organ can be truly artistic and dignified only if the instrument is one single sound-personality, which sends its music down to flood the nave from its natural place above its hearers." And secondly as to the structure of the organ itself. "It is very important that . . . as in the old organs (the Choir organ) stands in a case of its own in front of the great organ, and is thus both in position and sound distinct from the two other organs which are housed in the main case. If it is in the main case with them, it has no tonal individuality of its own—it becomes merely a supplement to the great organ. . . . A second organ with ten stops, placed as a choir organ should be, is superior in its effect to one with sixteen stops which is housed in the main case. . . . The speciality of the great organ is that its stops occupy the lower part of the main case, and have a full, round tone. That of the choir organ is that it is an organ by itself with clear-voiced stops, which sings out freely into the church under the great organ. That of the swell organ is that it is housed in the upper part of the main case, and from the highest and furthest point of the instrument sends out an intensive tone which can be modified as desired. The organ is a trinity in which these three tonal individualities make a unity. The better the special character of each organ is secured, and the better the three combine into a unity, the finer is the organ."

These words make a fitting introduction to discussion of the placing of organs in cathedrals.

The cathedral organ must inevitably be an instrument of considerable size, because it has three functions to perform. Firstly there is that of accompanying the cathedral choir; secondly that of accompanying congregational singing; thirdly its use as a solo instrument. Taking the first of these, we need to remember that our English tradition of cathedral music, typically represented by Purcell, Wesley and Stanford, demands for effective performance an organ of ample resources. The small organ common in many continental churches for accompanying music which is chiefly Gregorian would not be suitable here. As to congregational singing, the organ must be equal to the task of supporting two or three thousand people, and although it is often alleged that a congregation will sing perfectly well to hardly any organ at all, experience does not, I think, bear this out. Generally, if an organist dispenses with a firm body of diapason tone, half the congregation stop singing. Playing an ordinary hymn tune in such a way that a congregation will sing it is, it is true, an art in itself and by no means a common one; but those who possess it would be the first to stress the necessity for ample power. Thirdly as a solo instrument, a cathedral organ should at least admit of the adequate performance of organ music. I suppose it is just to say



STA MARIA CARIGNANO, GENOA (1660)

that the cathedral organists remain the typical exponents of our great English school of organ playing and it would be more than regrettable if performances of the best organ music had to be confined to the concert hall.

I do not think that anyone listening in the nave to the organ of, say, St. Paul's or Salisbury would say that they are at all too powerful for the building. By this I do not mean that cathedral organs should necessarily be bigger still; what I mean is that I do not think they can well be much smaller. The problem then that arises is, Given their present dimensions, where shall we put them? A suggestion sometimes heard is the west end position of cathedrals abroad. What however is feasible in cathedrals with an average height of over 100 feet is out

of the question here, where few vaults exceed 80 feet. The nave of Winchester for example is 78 feet compared with 140 feet at Amiens. A second suggestion—which has most unfortunately been acted upon in too many cases—is the division of the organ on either side of the quire, as is the normal practice in Spain. Here again however two factors are forgotten. Spanish cathedrals are for the most part loftier than English and, owing to the suppression or relative smallness of the triforium, the height of the arcade is much greater in proportion. How ineffective the arrangment is in England can be seen at Durham, Salisbury, and Worcester. The organ, instead of being framed in the arch, squeezes through the arch and pushes its pipes up to break the line of the string course above. The back of the organ impinges on the choir aisles, spoiling the long perspective and unobstructed space of what should be a processional way. There is no adequate room for the large 32 foot pipes and, being cramped in under the aisle vault, no adequate space overhead to allow of the sound coming out properly.

Of the ill effects of a fundamental mistake in the placing of the organ, the two most flagrant examples are Worcester and Hereford. Worcester is a positive *reductio ad absurdum*. On either side of the quire are two cumbrous blocks of organ, while in the south transept is a third—a huge and hideous object, nearly 100 feet away from the northern quire block. To the listener in the quire, sounds come from three quarters at once, producing the most crude distortions of balance and blend. Moreover at the Three Choirs Festival the organ is still in the wrong place and a small additional organ has to be built at the west end of the nave. At Hereford the organ is situated in the first bay east of the crossing on the south side. It presents to the quire a mean array of painted pipes, held together by ironwork. At the back it has, with its objectionable paraphernalia of pipes and naked mechanism, grossly disfigured the aisle. If the position were even acoustically advantageous or, from the organ builder's point of view, conveniently spacious, there might be some excuse; but it is obviously neither.

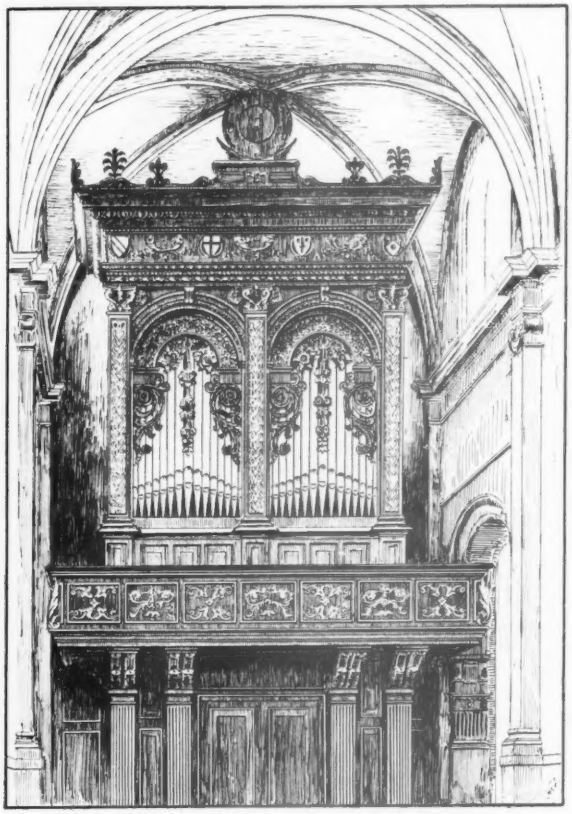
The ideal position clearly ought to ensure firstly that the organ should be well raised up; secondly that it should as far as possible form one unit and not two or three; thirdly that it should stand free, if possible on all sides; fourthly that the player should be as well able to accompany services in the nave as in the quire; lastly that no uncased portions should be exposed to view.

Where, it may be asked, are all these conditions fulfilled? Nowhere, no doubt, better than at King's College Chapel, Cambridge. Here is a very large organ, yet nothing of it shows except what is contained in the beautiful but rather exceptionally small case. But since King's is not a cathedral, Gloucester is perhaps a more apt exemplar. Here again the case is by no means large in height or width, but its depth makes it capacious, and what it cannot contain is accommodated in the screen itself, the 32 foot pipes being laid flat in the choir triforium. The organist enjoys a roomy organ loft and commands equally well both nave and quire, while the organ itself, in its open and lofty position, sounds magnificent.

The same is true in varying degrees of excellence of the other cathedrals which have their organs on the screen—York, Lincoln, Ripon, Carlisle, Manchester, Southwell, Norwich, Exeter, Wells and St. David's. Unfortunately not all these have cases worthy of their prominent place—Wells and St. David's in particular are atrocious objects. Westminster Abbey, St. George's Chapel, Windsor, and Rochester and St. Albans cathedrals also have their organs on the screen but divided into two halves placed against the wall on either side. Only at Westminster Abbey does this treatment justify itself—and there chiefly because the cases are good in themselves and have the merit of sitting back well against the wall. The division of the Windsor organ is quite recent and it is only fair to say that the architect for the restoration of the Chapel was, I believe, in no way responsible for it. The organ was never a specially beautiful object; but two wrongs do not make one right and its appearance now is far more unpleasing than it was before. The arrangement at Rochester is particularly futile. Sir Gilbert Scott divided the organ into two to leave a view of the east end visible in the middle, but the view thus obtained is so poor as to be not worth having.

While from the organist's and organ-builder's standpoint the screen position for the organ in most cathedrals is unquestionably the best, I would not, of course, suggest that all the cathedrals should be alike. The present position at Chester, for example, seems to me very satisfactory and the merit of Scott's case at Ely justifies its otherwise not ideal position. In general however the screen position is for cathedrals the right position and it is only a small minority in which adequate reasons exist for retaining the organ elsewhere.

Now it may be said, musically no doubt this is



RUEIL

An Italian case of the end of the fifteenth century removed from Sta Maria Novella, Florence and given by Napoleon III to Rueil

true; but what about architectural considerations? I would reply that if it is desirable musically, the organ on the screen is fully as desirable architecturally. The mediæval builder was well aware of this and did not make the absurd mistake of allowing his interiors to be seen from end to end at a glance. That aberration which delights in the so-called 'vista' is only a century old, having originated with James Wyatt's restoration of Salisbury. How many, I wonder, of those who are so zealous for the removal of organs from the screen realise that in that egregious personage they have their spiritual father!

The appearance of those cathedrals from which the solid screen carrying the organ is absent is the exact antithesis of what the mediæval architect intended. So much did he dislike open, unimpeded views that he never tired of erecting high reredoses, elaborate chantries, parcloses and tombs. And in doing so he evinced a very sound æsthetic instinct. The reason why those cathedrals that retain their screens and organs find them such precious possessions is that they serve to increase the apparent size. Not all can be seen at once and nothing so well suggests the illusion of space as an impression of distance. Those cathedrals that have only light open screens do not look their size; the east end appears nearer than it really is and the whole perspective is foreshortened. On the other hand in such an interior as York the dark silhouette of the organ seems to throw back the quire, suggesting enough but not too much of what lies beyond. It has to be remembered that a far more vivid impression of length is derived from the rhythmic repetition of the arches of arcade, triforium and clerestory seen in perspective at the sides than by a central view of the whole of the east window in the centre. This is another argument against dividing the organ into two on the screen as at Windsor.

If some would maintain that mediæval organs on screens were nothing like their present successors but were quite small and unobtrusive, such an argument should be accepted with reserve. After all the organ in old Radnor church, which itself stood on the rood-screen, was 18 feet high, and if this was the height of an organ in a comparatively obscure Welsh village, it is not unreasonable to assume that cathedral organs were at least as big if not bigger. It would have been perfectly consonant with what we know of the mediæval mind to accept and indeed welcome the largest organ obtainable.

However there is yet one objection to organs on screens which is usually brought out as a trump card. Whatever, it is alleged, may be their musical, architectural and historical justification, they are certainly not practical. Organs on screens may have been very well two centuries ago; they are out of the question to-day. It is just on this score of convenience that ultimately a reversion to the screen position depends and such an argument can be met with the assertion that, so far from impairing the efficiency of a cathedral for present-day needs, the screen position if anything improves it.

I cannot do better than illustrate this by reference to one cathedral. For reasons which will later become clear, Durham is a specially apt choice. The Rites of Durham, written in 1593, provide us with unusually full information as to its earlier organs. At that time the cathedral contained as many as five organs. The most important was the great organ standing on the pulpitum under the eastern arch of the crossing, a

large and elaborate instrument evidently highly prized since it was "only opened and playd upon at principall feastes." For the accompaniment of the ordinary Sunday services, "a faire paire of large organs," called The Cryers, was used. This stood in the westernmost bay on the north side of the quire and opposite to it was another organ known as The White Organs, used on weekdays. The fourth organ stood on the north side of the nave near the Jesus altar and was used for the Jesus mass every Friday, while the fifth was in the Galilee. The organs, like the rest of the woodwork, were burnt by the Scotch prisoners quartered in the cathedral after the battle of Dunbar. At the Restoration therefore, Bishop Cosin, as part of his refurnishing of the building, erected on the site of the old pulpitum a new and richly carved wooden organ screen, to which, in 1683, his successor, Bishop Crewe, added an organ. The builder of this famous instrument was Father Smith and the case was the largest and finest of all his four-towered designs, being rendered unusually splendid by the large mitres on the side towers and the coat of arms that surmounted the centre.

This stately organ remained in position till 1846, when certain deplorable alterations were made under Anthony Salvin. As was general in cathedrals up to then, the nave was unused and all services were held in the quire. The Chapter called in Salvin to advise on the provision of more seating accommodation, and accepted his recommendations to throw nave and quire into one by the removal of the organ and screen. The screen was abolished altogether and the organ set up in a mutilated state on the north side of the quire east of the stalls.

The disgust of the organist may easily be imagined. A story indeed is recorded of how a well-meaning but foolish person accosted him in one of the streets of Durham, shortly after the change had been made. "Mr. Henshawe," he said, "you must feel the Cathedral organ to be almost a part of yourself." "Sir," was the indignant reply, "I *did*!"

The mistake however was as grievous architecturally as musically. The appearance of the interior without a screen of any sort to break its length proved so disappointing that the Chapter, after putting up with it for some years, had recourse to Sir Gilbert Scott. A new screen of marble, mosaic and brass was soon supplied, the organ case removed altogether and the organ rebuilt in its present unsatisfactory position on either side of the quire behind the stalls.

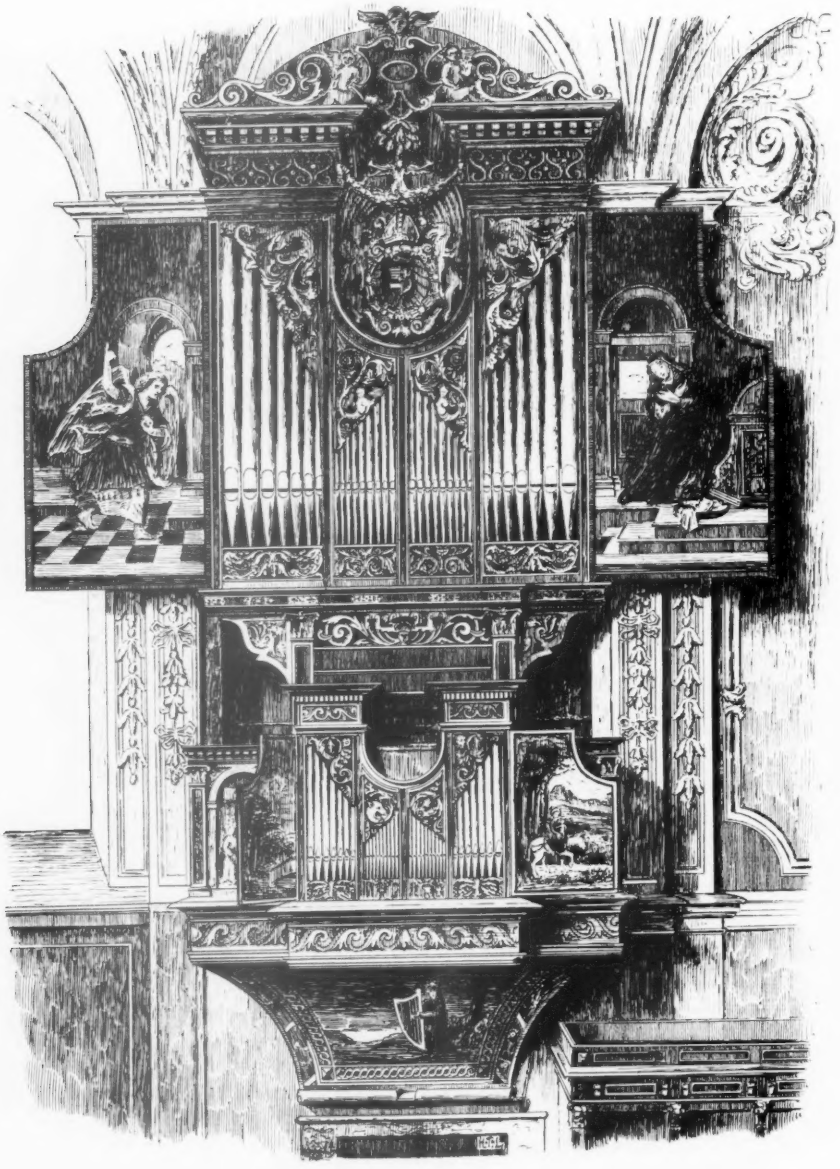
What has been the effect of this open screen upon the working of the cathedral? It has, as at Salisbury and Worcester, turned the cathedral into a gigantic parish church in which the congregation tend to occupy the nave, while the choir sit in more or less solitary state in the quire. The distinctive cathedral separation of nave and quire, so well seen at the rival cathedrals of York and Lincoln, has been lost and the whole significance of the interior stultified. Durham is in fact neither one thing nor the other, for the loss of its traditional arrangements disqualifies it from the proper conduct of cathedral worship, while those very qualities of length, height and size which characterize it as a cathedral make it hopelessly unsuitable for parochial worship.

In the great space of the nave, the average weekday congregation not only looks forlorn but is at such a distance from the choir as to make it difficult to share comfortably in the service, a disadvantage aggravated by the disturbance of stray visitors coming in during service-time. Nor do the present arrangements even make the best use of the space available. The high altar being out of sight of both transepts and so far away from the western third of the nave, the only portions of this immense building which are available for effective congregational use are the quire and that part of the nave between the crossing and the north and south doors.

There is no need to enlarge upon the disappointing appearance of shortness with which the interior of Durham surprises those who have wondered at its huge bulk outside. Perhaps no cathedral so completely fails to look its real size. It is a defect due primarily to the inadequacy of the open screen, not so much on account of its design and materials, incongruous as they are, as on account of its openness. The alternative design for a wooden screen prepared by Mr. Hodsgon Fowler would have incurred the same condemnation. In such a position the light open screen so popular at one time is foredoomed to failure.

Let us now assume the restoration of the old organ screen with the organ upon it. How would it influence the working of the cathedral? While it would sever the nave and quire so that they could no longer be used together, it would restore to the quire the essentially cathedral attribute of enclosure. And since the quire seats about 200, it would be amply large enough for the choir offices on weekdays, if not also for the afternoon Evensong on Sundays.

Clearly a solid screen entails revival of the nave altar which formerly was almost general. At Durham this nave altar would best be placed, not as at some

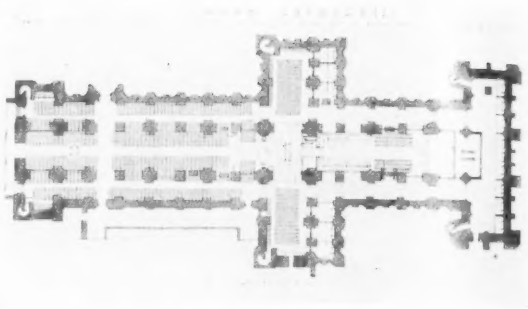


Franziskaner Hojkirche, Innsbruck
Built in 1560 by Georg Ebert, of Ravensburg
From the drawing by Mr. H. T. Lilley

ROSKILDE CATHEDRAL, DENMARK

cathedrals under the western arch of the crossing, but in the centre of the crossing itself. This, it is true, was not the position of the old Jesus altar, but there is no need to reproduce a purely monastic arrangement, especially since the great reredos behind the Jesus altar has perished and cannot be replaced. The advantages of the position at the crossing are considerable. Firstly it is architecturally ideal. The altar would derive from its position at the meeting point of nave and transepts the maximum of openness and space. Sunlight would fall on it from the big south transept window, solemn and dramatic illumination from the lantern overhead. Secondly, it would permit of a fine arrangement of steps in connection with the entrance to the quire. There would be plenty of space behind the altar for access to the central doors in the screen. Thirdly, being under the crossing, the altar would not absorb valuable space in the nave itself. Its position, open to both transepts as well as the nave, would enable very large congregations to be in full view of the altar and would actually seat in these three limbs a far greater number than can at present be seated in sight of the altar in the two limbs of nave and quire. The statistics of seating are worth summarizing. Under present conditions, that is with the joint use of nave and quire, the number of persons who can worship in sight of the altar is approximately 650 (200 in the quire and 450 in the nave) or 1,000 if we include the western third of the nave which is virtually out of range for seeing and hearing. If the organ screen were restored, a nave altar placed under the crossing and seats for the clergy and choir disposed in the easternmost bay of the nave, the available seating would be 1,250 or nearly twice as much, 210 in each transept and 830 in the nave, where the western third would now be within range. With the nave aisles which could also be brought into use, this total would rise to 1,850 and if a closer spacing of seats in the main nave blocks were adopted (5 sq. ft. per person instead of 7 sq. ft.) it would become 2,050. Of course in any cathedral or church, the smaller the seated area the better; these figures are merely intended to show that the objection to solid organ screens on the score of *loss* of seating is in fact both superficial and unjustified.

To restore then the screen and organ would not be just a reversion to traditional arrangement; it would be a conspicuous improvement in the efficiency of the cathedral. The nave would be put to its fullest use and fulfil once again its proper function as the church of the people. The quire would recover its more intimate associations as the rightful place for the chanting of the daily offices, for which in a great church some degree of enclosure and seclusion is desirable.



DURHAM CATHEDRAL
Plan showing the restoration of the organ screen.

To discuss in further detail the many points which such a restoration would involve is not possible here. It is more important that I should conclude this paper by giving you a brief explanation of why I have spoken at some length about Durham in particular. An opportunity of such an exceptional kind presents itself there that the circumstances deserve to be widely known.

When Bishop Cosin's organ screen was taken down, it was dispersed but not destroyed. Nearly the whole of it was given to University College and is still to be seen in the Castle, where the separate portions of it have been disposed in various places. Similarly the Father Smith organ case, when turned out at the time of Scott's restoration, was dismantled but not thrown away. The small choir case went to the Castle and is now in the west gallery of the chapel. The pieces of the main case lay about for years until, after many vicissitudes, one front of it was pieced together and laid out on the floor of the cathedral library. Here it remained till this year, when the present Dean and Chapter caused it to be erected against the wall in a bay of the south aisle of the nave. Underneath have been placed some portions of the screen loaned for the purpose by the University. Only a frontispiece as it is and manifestly incomplete, this restoration yet conveys an idea of how grand the screen and organ would look were they erected in their original position. From the technical point of view, such a re-erection is a perfectly feasible proposition. Though only one half of the case has been assembled the woodwork of the

other half still exists, and could, if collected, be equally well put together. Most of it is still in the possession of the cathedral. Two of the towers however are to be seen against the walls of the great staircase in the Castle, turned upside down and serving as pedestals to busts—a somewhat ignominious function from which the University would no doubt willingly facilitate their release. It may be noted that since theoriginal contract for the organ, still preserved, stipulates that the east and west fronts shall be identical, there is all the evidence for the completion of the missing half.

DURHAM CATHEDRAL
A drawing showing the appearance of Father Smith's organ and Bishop Cosin's screen restored to their original position
From a drawing by S. E. Dykes Bower

The rebuilding of the organ on the screen need present no difficulties from the organ builder's standpoint. If the case, as has been done at Gloucester and elsewhere, were deepened from west to east there would be plenty of space for the present large instrument, since extra accommodation would be provided by one half of the screen itself and the quire triforium would take the 32 foot pipes laid flat.

To ask for the return of the woodwork of Bishop Cosin's screen may well seem an ambitious request to make of the University, since the latter received it as a free gift. But, while this is not the place to discuss how such a transaction might be accomplished, that this woodwork ought to be recovered for the cathedral and reinstated in the position for which it was designed cannot, I think, be doubted. The screen forms an integral part of that unique heritage of seventeenth-century woodwork to which Durham owes its stalls, font cover, and clockcase—shortly, it is hoped, to be restored. It is, besides, the only cathedral screen of its kind, a work of robust and vigorous craftsmanship unrivalled save by the earlier screen of King's College Chapel, Cambridge.

A proposal so beneficial from every point of view—historical, arcnitectural, musical, practical—deserves the support of all who know this incomparable cathedral. To those in particular who appreciate organs and organ cases, its accomplishment must seem almost an obligation.

Review of Practice

ARCHITECTURAL COPYRIGHT

A case of some importance to architects, in which an architect claimed to restrain a builder from alleged copying of his design for a house, has recently been decided in the Chancery Division of the High Court.

The circumstances were as follow:—

The architect desired to build a house for himself in the Tudor style and employed a builder who did not profess experience of this style, giving him some 24 drawings to work to. The house was satisfactorily completed and while the builder was still in possession of the drawings he (the builder) erected another house which, though not identical, possessed features not only similar but so similarly arranged as to suggest to a lay observer that the house was a copy of that previously erected, subject to slight modification of the plan. Among other things the large gable with barge board, chimney stack with offsets and weatherings, random stone work, long sloping roof, plinth, long window under eaves on an extended half-landing with upper flight of stairs following the roof slope, were cited as examples of similarity, especially as having similar juxtaposition. The existence of a very small window framed in stone, shown on the architect's drawings but omitted by agreement, which was incorporated in the builder's second house, was also cited as evidence of copying an unusual feature. The builder's assistant in evidence said that he had no knowledge of the drawings of the architect's house and had designed the second house as the result of his own knowledge and experience, and on this evidence the judge found for the defendant builder.

In giving judgment the learned judge made among others the following observations. "He (the plaintiff) is an architect of both skill and taste. From the photographs I have seen the result was a very charming building . . . in the Tudor style. The house was begun in November 1931 and finished the following July. In January 1932 the defendant was approached by a building owner about erecting a house on another estate. The plaintiff was struck by the resemblance to his house. It is a smaller house, a piece in the middle is omitted, but it is in many ways very similar to the plaintiff's house. It seeks to imitate the Tudor style but was artistically a failure compared with the plaintiff's house. So far as that suggestion (making use of the plans) goes it is completely negatived by the evidence given on the part of the defendant. While he (the witness in question) was doing work for the defendant, before he was actually in his employ, he did in fact design the house (complained of), *i.e.* he prepared the plan called the building plan; he had never seen the plaintiff's house and therefore so far as any question of the plans being made use of for the purpose of reproducing . . . that suggestion completely fails. I am not greatly impressed by the fact that these two houses bear some resemblance to each other. They are both intended to be a reproduction of the Tudor period. I should find it difficult to draw the inference that one was in any sense a reproduction or a copy of the other."

During the action his lordship said, "we all recognise copyright in plans but my difficulty is, is there any copyright in a house? If I took a fancy to Haddon Hall and had a house erected as a copy what would be the position?"

The Copyright Act of 1911 Section 35 gives the following definitions:—

> "Architectural work of art" means any building or structure having an artistic character or design in respect of such character or design or any model for such building or structure, provided that the protection afforded by this act shall be confined to the artistic character and design and shall not extend to processes or methods of construction.
>
> "Infringing" . . . means any copy including any colourable imitation.

It is therefore clear from the Act that copyright applies not only to plans but to a design as a whole, and, one would therefore presume, to a house, though in the case of Haddon Hall any copyright would long since have ceased to exist owing to the date of erection. An artistic design may consist of novel or known features assembled in some manner which confers on the design some distinctive character; in fact most artistic designs, not only in buildings but generally, consist of features already well known and commonly used, the individuality and hence the rights in these resulting solely from their special application or juxtaposition. As an analogy there is no copyright in the notes of a piano or even in the common chord of a scale, but if these notes are woven into a melody the author has a claim to copyright. The features of Tudor architecture are well known, and the degree of merit and individuality in bringing them together must of course be a matter of opinion. With this account of the proceedings of this action readers must be left to form their own views, but the outcome of this action would appear to be that where an architect wishes to safeguard his design he should not merely rely on the law of copyright but should obtain an undertaking from his contractor that he will not reproduce what could be regarded as a copy of his building.

ALAN E. MUNBY [*F.*].

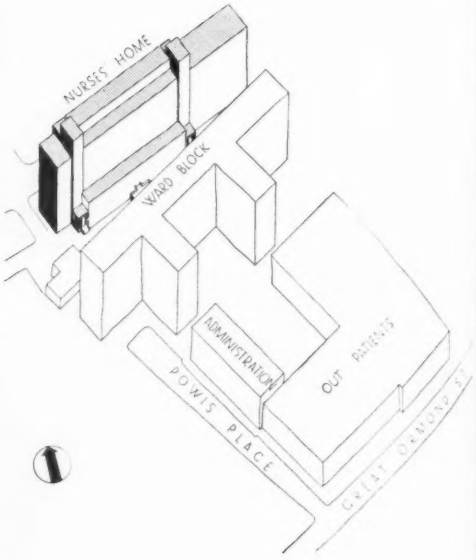
The main entrance in Guilford Street. The carved Portland Stone panel is by Mr. Eric Aumonier and represents the Nine Muses, with Hygeia in the centre. The doors are painted green with bronze furniture. Over the entrance is a lead cornice partly gilded. The paving is of York stone and Westmorland slate

THE NURSES' HOUSE, THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET, W.C.1

Architects: Stanley Hall and Easton & Robertson

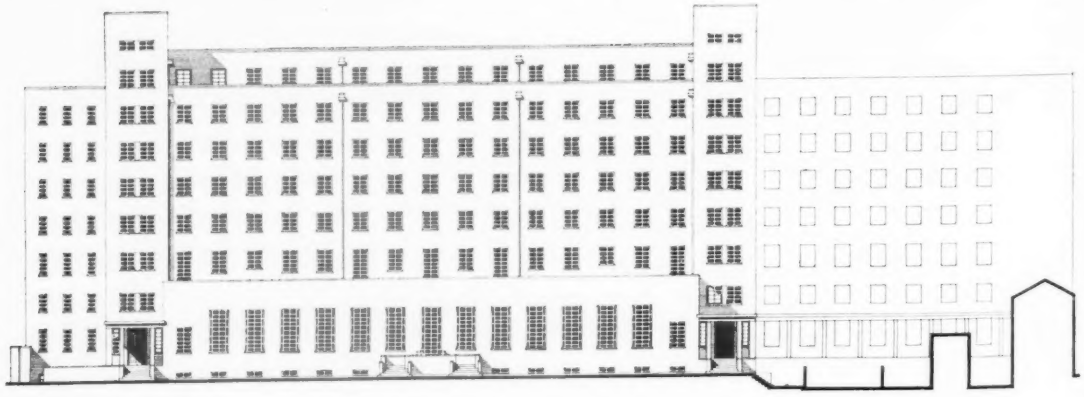
THE SCHEME.

The new Nurses' House is the first part executed of a scheme for rebuilding the whole hospital. The site, which is roughly rectangular, lies between Great Ormond Street on the south and Guilford Street on the north. The whole scheme has been planned in general layout and massing so that the tallest buildings are on the north side, stepping down to single floor buildings on the south, in order that the maximum of direct sunlight may be obtained (see Axonometric drawing on p. 968). The future administration block is an old building which is to be converted; it contains the existing chapel which will not be altered. Otherwise the buildings will be entirely new. A small part of the outpatients' department has already been built.



Above is an axonometric drawing showing the layout of the whole scheme. The Administration block is an old building to be converted, the others are to be new structures

On the left and below are a view and an elevation of the south side, facing the future ward block. The bricks are a grey buff with slightly recessed joints; the windows are painted cream



SOUTH ELEVATION

THE NURSES' HOUSE.

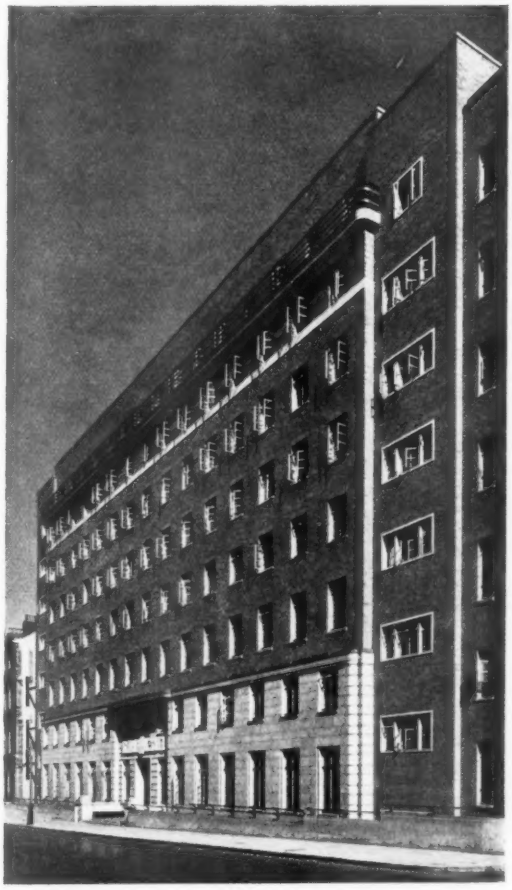
The new building has nine floors: the basement which is mainly storage space for the hospital; the ground floor, containing the general living rooms; the mezzanine which is devoted to sick rooms; the first and second which are for sisters and superintendents; the remaining four floors contain nurses' bedrooms. The present accommodation allows for 126 nurses and 30 sisters. The future extension (shown on the elevations) will contain 72 extra bedrooms, accommodating 24 nurses and 48 maids.

STRUCTURE AND EQUIPMENT

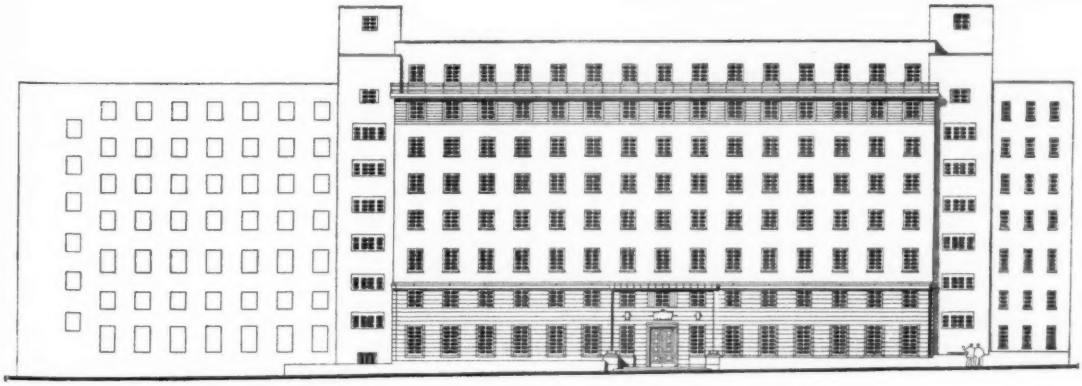
The building is steel-framed with hollow-tile floors and staircases. The steel frame filling is of brick, faced with grey-buff facing bricks and Portland stone in dressings. The flat roofs, which are usable as promenades, are surfaced with Paropa roofing. The windows are of steel, painted cream.

Heating is by low pressure hot water ceiling panels throughout, operated by calorifiers in the basement working off the main steam plant of the hospital. There are two push-button automatic lifts.

The interior walls and ceilings are painted, principally a pale flesh colour. Floors are covered with jarrah blocks in corridors and bedrooms, with teak boarding in the nurses' common and dining rooms, Rhodesian teak blocks in some of the smaller living rooms and cream terrazzo on the stairs, landings and lavatory floors. Lavatory partitions are of pre-cast terrazzo

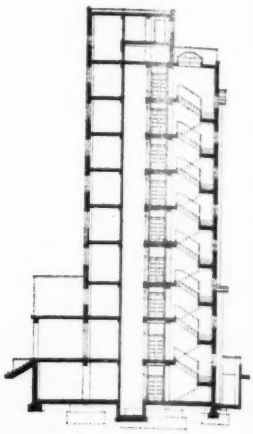


The Guilford Street façade of the Nurses' House, on which is the main entrance. On the right is the lavatory and bathroom block and the future extension in outline on the left

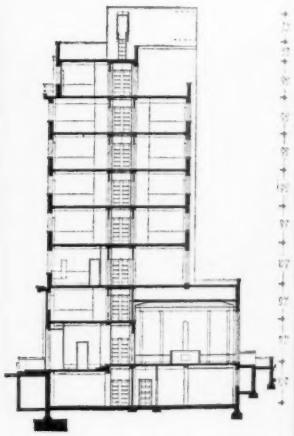


NORTH ELEVATION

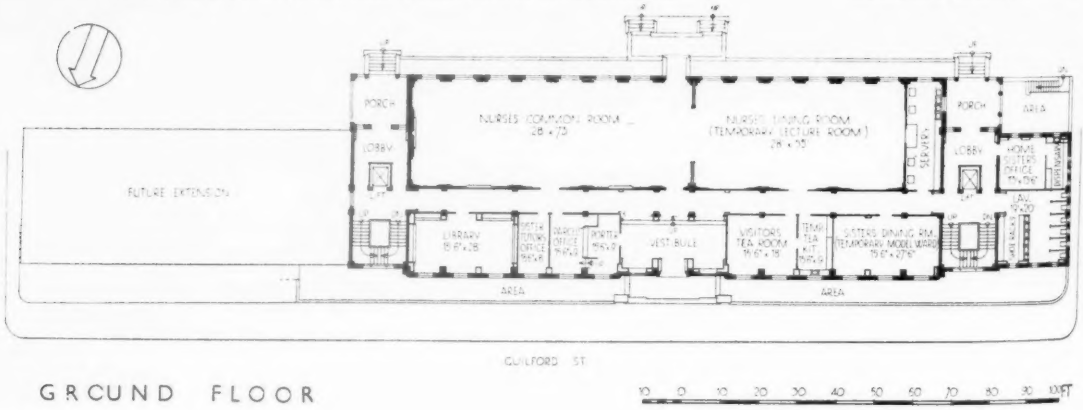
One of the two south porches made of cream-coloured reconstructed stone



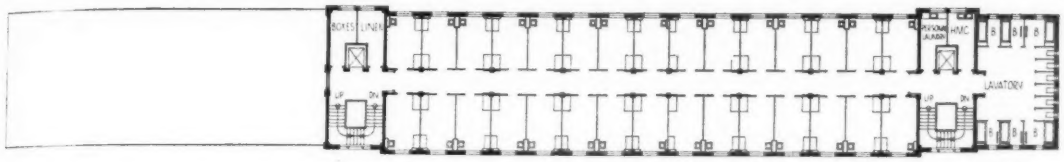
Section through Staircase



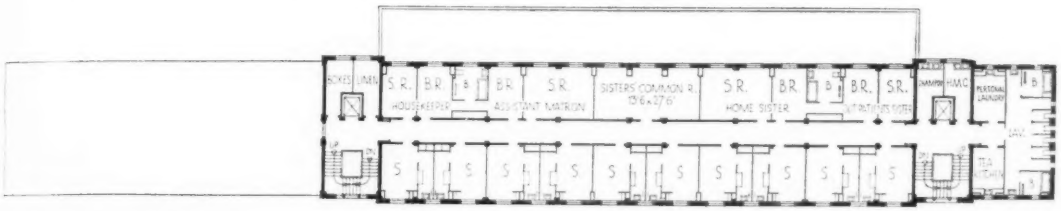
Section through Entrance Hall



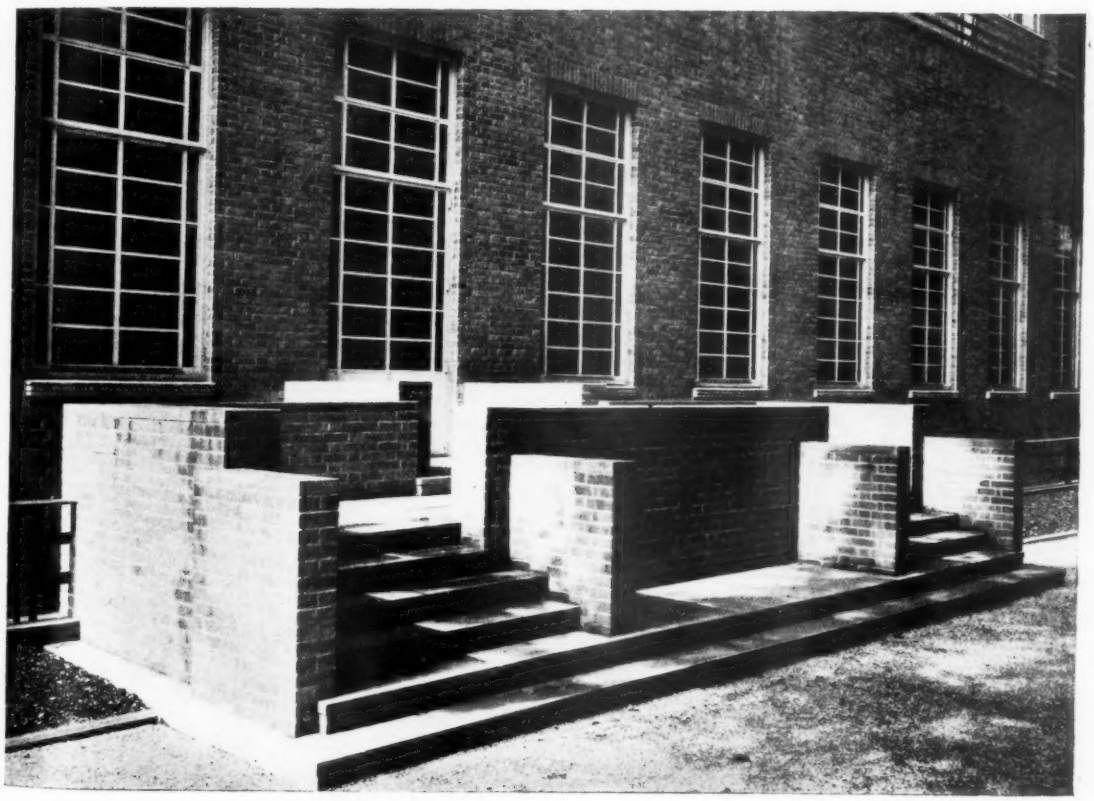
GROUND FLOOR



THIRD FLOOR (4TH & 5TH FLOORS SIMILAR) NURSES BEDROOMS



FIRST FLOOR



Steps leading from the Nurses' Common Room on the south side

One of the nurses' rooms. The joinery is of Indian white mahogany; the floors are of jarrah blocks and the skirtings ebonized

panels. In the main hall the floor is of an open textured Portland stone (Perrytrav) and the pier casings and skirting are of polished shelly Portland stone (Perrycot).

THE BEDROOMS

Apart from four suites for head sisters, the rooms are of two types. A typical nurses' room contains built-in furniture of Indian white mahogany, lightly stained and polished, consisting of hanging cupboard, chest of drawers, bookcase, etc. The sisters' rooms have the greater part of the fitted furniture in small dressing room annexes. All rooms have fitted lavatory basins backing in pairs on a vertical duct, with access panels under the basins. Lighting is by a central ceiling point and a bedside standard. On each floor is a calling bell operated from the home sister's room and an electric clock visible from all bedroom doors.

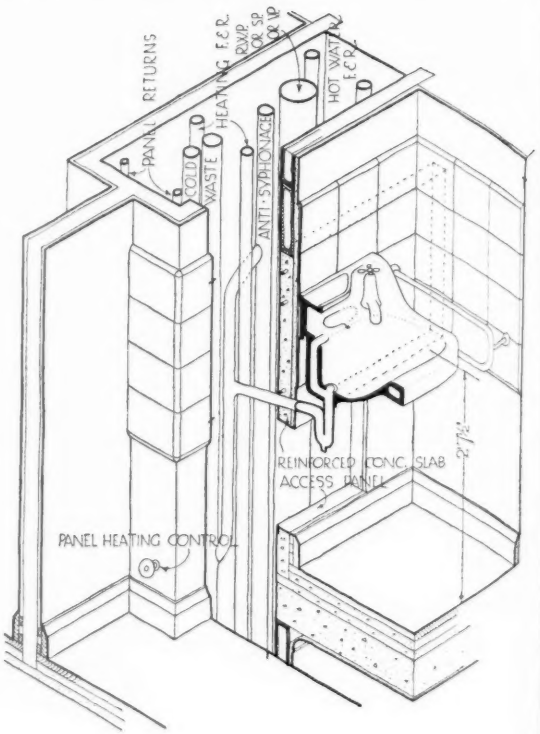
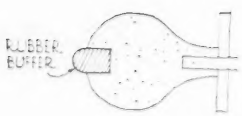
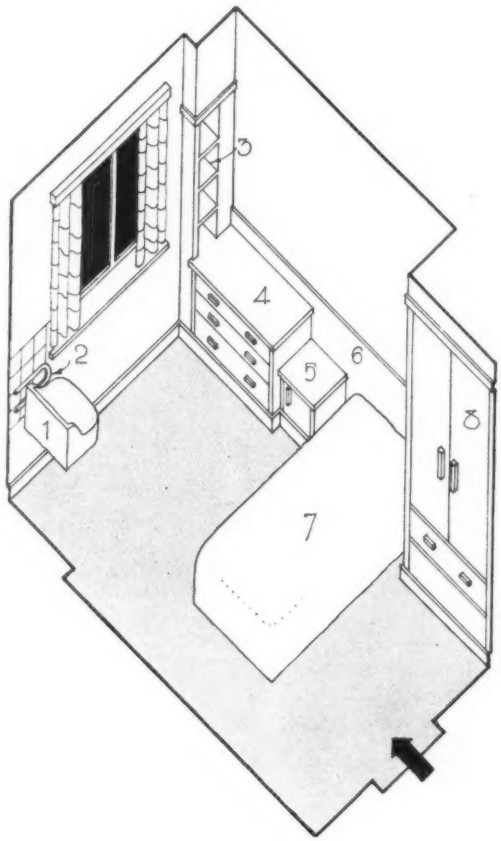


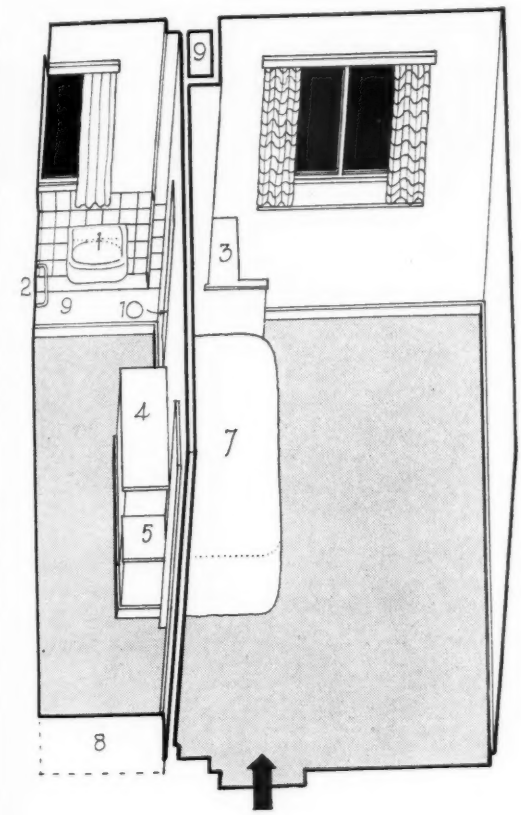
Diagram showing the special cantilever fixing for lavatory basins of a reinforced concrete slab built with the partition. There is an access panel below the slab. The basins are in pairs backing on a vertical pipe duct



A rubber pad fitted in the end of the inside knob of the W.C. doors to act as a door stop

Diagrams showing (below) one of the sisters' rooms with dressing room and (on the right) one of the nurses' rooms. Reference: 1, Lavatory Bowl, 2, Towel Rail, 3, Book Shelves, 4, Chest of drawers, 5, Stool and Linen Box. 6, Plywood Dado. 7, Bed. 8, Wardrobe. 9, Pipe Duct. 10, Mirror. Heating is by ceiling panels, controlled by a valve at the side of the pipe duct. A ceiling light and bedside standard light are provided; each corridor has a clock, visible from all bedroom doors and a calling bell





C

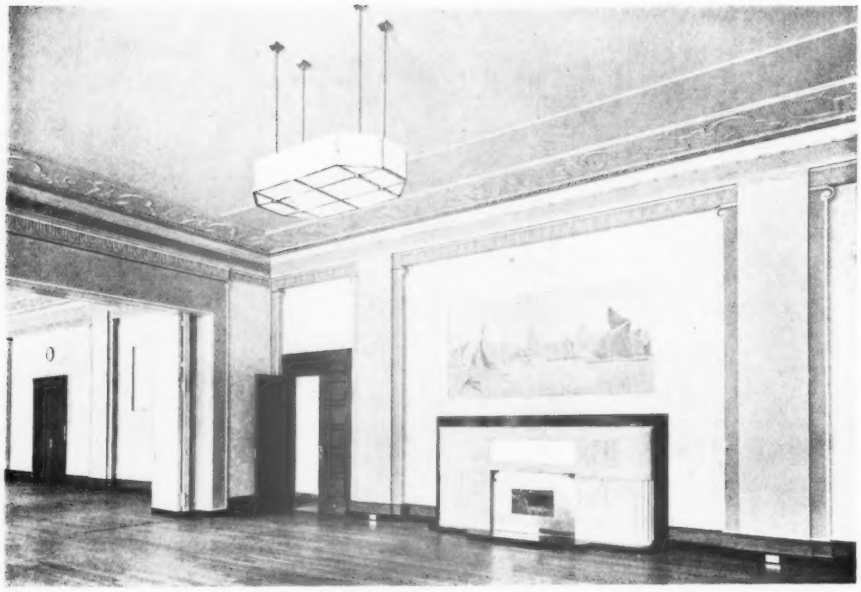
CONTRACTORS AND SUPPLIERS

GENERAL CONTRACTORS: Leslie and Co., Ltd., Kensington Square, W.8.

STRUCTURE: Facing bricks, Williamson Cliff, Ltd. Structural steelwork, Archibald D. Dawnay and Sons, Ltd. Hollow-tile floors and roofs, the Kleine Co., Ltd. Partitions and "Paropa" roof surfacing, Frazzi, Ltd.

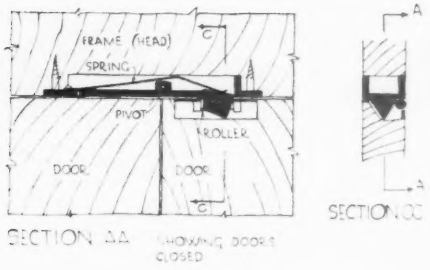
STRUCTURAL FINISH: Teak and jarrah floors, Acme Flooring and Paving Co., Ltd. Steel windows, Crittall Manufacturing Co., Ltd. Drainage, plumbing and sanitary fittings, Dent and Hellyer, Ltd. Terrazzo floors and walls, Diespeker and Co., Ltd. Fibrous plaster and decorations, G. Jackson and Son, Ltd. Marble, W. W. Jenkins and Co., Ltd. Tiling, Martin van Straaten and Co. Skylights, British Challenge Glazing Co. Metal railings, Dennison, Kett and Co., Ltd., and Arthur F. H. Maxted, Ltd. Metal work, Wainwright and Waring, Ltd. Door furniture, Joseph Kaye and Son, Ltd., Nettlefold and Sons, Ltd., and Carter and Aynsley, Ltd.

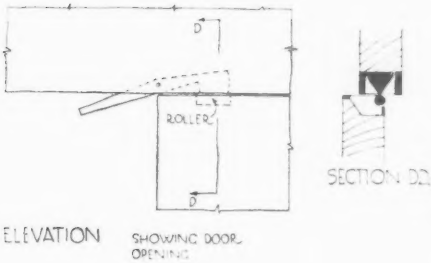
EQUIPMENT: Heating and hot water services, Benham and Sons, Ltd. Electrical installation, Drake and Gorham, Ltd. Lifts, Waygood Otis, Ltd. Folding partition, Educational Supply Association, Ltd. Electric fires, Ferranti, Ltd. Incinerators, William Sugg and Co., Ltd. Furniture, D. Burkle and Son, Ltd.



Part of the nurses' common room and dining room which are separated by a folding partition. The electric fires have Botticino and Belgian black marble surrounds, with antique inset plaster panels. The ceiling and walls are painted in tones of flesh colour; the floor and joinery are of teak

One of the two staircases which are of hollow tile construction faced with light terrazzo, the landings being in pre-cast slabs of the same colour, with black joints. The balustrade is of iron, painted bright green, and the handrail of aluminium alloy (Birmabright)





An ingenious latch on the double doors of the sitting room. One leaf has an ordinary latch lock, and when closed, holds the other leaf by means of an overhead, spring-operated lever catch

Review of Construction and Materials

This series is compiled from all sources contributing technical information of use to architects. These sources are principally the many research bodies, both official and industrial, individual experts and the R.I.B.A. Science Standing Committee. Every effort is made to ensure that the information given shall be as accurate and authoritative as possible. Questions are invited from readers on matters covered by this section; they should be addressed to the Technical Editor.

The following are addresses and telephone numbers which are likely to be of use to those members seeking technical information. There are many other bodies dealing with specialised branches of research whose addresses can be obtained from the Technical Editor. We would remind readers that these bodies exist for the service of Architects and the Building Industry and are always pleased to answer enquiries.

The Director, The Building Research Station, Garston, Nr. Watford, Herts. Telegrams: "Research Phone Watford." Office hours, 9.30 to 5.30. Saturdays 9 to 12.30.

The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks. Telephone: Princes Risborough 101. Telegrams: "Timberlab Princes Risborough." Office hours, 9.15 to 5.30. Saturdays 9.15 to 12.

The Director, The British Standards Institution, 28 Victoria Street, London, S.W.1. Telephone: Victoria 3127 and 3128. Telegrams: "Standards Soucest London." Office hours, 9.30 to 5. Saturdays 9.30 to 12.30.

The Technical Manager, The Building Centre Ltd., 158, New Bond Street, London, W.1. Telephone: Regent 2701, 2705. Office hours, 10 to 6. Saturdays 10 to 1.

STEEL AND STEELWORK

At the International Congress for Steel Development, held in London from June 20 to 22, several papers were read dealing with recent technical advances in the use of steel. While some of these were concerned with the employment of steel in bridge, railway and mine engineering, the majority had direct reference to building. The following is a discussion of the principal items in these lectures.

SHEET METAL FOR FACING BUILDINGS

In an interesting paper entitled "The Architectural Uses of Sheet Metal Products" Mr. Francis Lorne [*F*] discussed the use of sheet metal as a logical material for facing the framed building. He emphasised the importance of reducing the proportion of dead load in building structures. Clearly the present day use of heavy stone and brick facings on steel framed buildings is wasteful since they add appreciably to the amount of steel used for carrying dead load in the building as well as to the cost of foundations. The reasons for the continuance of this practice are many and may be conveniently summarised as: conservatism of clients, especially the richer sort who think that only a stone-faced building will worthily uphold their dignity; building and fire regulations and the outlook of those who administer them; the known weather-resisting qualities of stone and brick and the uncertainty of finding a reliable and light substitute for them.

In discussing the possibilities of light sheet metal facings, Mr. Lorne summarised the requirements that have to be met. The material must be able to withstand the expansions and contractions due to heat changes; it must have a reasonably high degree of thermal resistance; the finish should preferably be inherent in the material and the surface should be able to withstand the abrasive effects of dust and grit in high winds; it must be convenient to handle and fix and have entirely reliable joints. It need not be strictly comparable in cost with present methods, because the cost saving is to be expected more in the reduced weight of the supporting structure.

The aim is clear: it is to obtain a surfacing material that has the qualities of brick and stone in weather and fire resistance, low upkeep and reasonable thermal conductivity, but without their weight. The author suggested that the surface skin material might ultimately be found along the line of stainless steel, if this could be produced at a good deal lower cost than at present, or along the non-ferrous metals such as copper and aluminium; the required insulation would be obtained by the use of cork or aluminium foil, though the possibilities of hollow, vacuum skins—on the thermos flask principle—should not be overlooked.

It has for some years been a fairly common practice to use sheet metal for parts of buildings as, for instance, breast walls under windows; these may be of bronze, steel or cast iron. In Denmark, Germany and America whole buildings have been faced with sheet copper. Good fixing and thermal insulation of light weight are not difficult to obtain; it is more difficult to avoid ill-effects from internal condensation and still more difficult to arrive at a satisfactory degree of fire-resistance. It is true that sheet metal facings will not burn, but they may conduct heat to other parts of the building and, in a fierce fire, they can melt.

STEEL HOUSES

An interesting account of American practice in mass production of houses with steel framework and sometimes with steel sheet facings was given by Mr. Frank L. Main in a paper "Steel Sheet Usage in Building Construction." Though written with "pep" (one of Mr. Main's sub-heads is "Tell the World about Steel for Houses") the paper contained some interesting information, new to this country, on "nailable" steel frames. It is now fairly common practice in America to sell pre-fabricated houses that have a light steel framework to which wooden infilling can be nailed. This is done in a number of ways: (1) Steel members of light weight channels are placed back to back with a nailing strip of wood or aerated concrete between them. (2) Two similar pieces of steel are placed back to back with a space between them large enough to take and hold a wire nail; the surfaces of the steel may be roughened for this purpose. (3) As No. 2, but the backs of the steel members so shaped that the driven nail is bent over and clinched in place. (4) A special hardened steel drive screw which pierces a thin flange, cutting its own thread. (5) A special power hammer drives nails through the surfacing materials. When the nail makes contact with a steel member an electric circuit is closed and the entering end of the nail is securely welded to the member.

Mr. Main gives an interesting example of the life of a steel frame, in a house, unprotected by concrete. The house was demolished in 1930 to make room for a larger building, after

standing for forty years on a humid site, not far from the sea. "It was found that rust had not penetrated any of the members to any serious extent and, in some instances, it was possible to unscrew the bolts with which the frame-work had been originally assembled." It would be interesting to know what paint, if any other than works priming, was used on the steel frame when assembled. Next to nothing is known about the diminution in strength of steel framing when enclosed in a cavity and not closely cased in concrete. It would be useful to know the degree of resistance to corrosion offered by, say, cement slurry, oil paint and bitumenous emulsions under these conditions.

Apparently the cheap sheet-steel faced frame house has little more success in America than did the Weir houses in this country. There is "less sales resistance"—to quote Mr. Main—to the steel-framed house surfaced with other materials such as boards or shingles or veneered with brick or stone.

STEEL COLUMNS WITH CONCRETE CORES

Although the normal concrete casing, added to steelwork members for protection against fire, is known to add to their strength, few building codes permit this fact to be taken into account in design. In a paper having the above title Dr. A. Kloppel described some German experiments on certain composite stanchions, specially designed to take advantage of the added stiffness given by concrete. The stanchions consisted of pairs of channels held apart by distance pieces with the intervening space filled with concrete. In two types the channels were turned outwards, and in two types inwards: in each type the various samples had different spacings. The tests were made in the laboratory with accurate mixing and placing of concrete.

The results were somewhat surprising. The addition of the concrete core was found to raise the resistance to buckling of the stanchions by 12 to 87 per cent. It is clear that this type of stanchion—much more common on the Continent than with us—has a much greater strength than is attributed to it on the basis of most building regulations. It is proposed to extend the experiments to horizontal members such as girders and floors and to complete frames.

STEEL FRAMED TENEMENTS

Mr. T. Elshout, of Holland, in "Working-Class Flats at Rotterdam," described a very interesting scheme of tenements, nine floors high, with lifts, built for 8d. per cubic foot at par of exchange (1s. 1d. at present rate of exchange), or £230 per flat (£377 at present rate of exchange) of two bedrooms, sitting room, kitchen and bathroom with shower. The true comparative value for British conditions would lie somewhere between these two figures. While the structure does not conform to British ideas on fire resistance (only two of the nine floors are fully fire-resisting) the cost is so low that an examination of the scheme is worth while.

The building is planned in regularly spaced bays, so that the steelwork is practically in standardised units. A special travelling gantry striding the building allowed the steelwork to be erected to its full height a bay at a time, a method quite different from the usual one of carrying up the framework simultaneously in the whole building.

The partitions between flats are double, of pumice blocks, and enclose the diagonal wind bracing. The external panel wall filling is of pre-fabricated wooden frames, covered outside with ⅛-inch hot galvanised sheet steel, and inside with 3½-inch pumice blocks, plastered. It should be noted that these walls are at the back of the balconies, which run along both sides of the building, one balcony being for access, the other being subdivided to form private balconies. The floors of the balconies are of pre-cast pumice concrete slabs, carried on channel members, the balustrade panels being of ⅛-inch sheet steel plates, galvanised after being drilled for fixing.

Mr. Elshout does not give full particulars of the item of greatest interest to us, namely, the "vertical" method of erecting the steel frame. It would be interesting to have comparative figures of cost and speed of erection by the travelling gantry and by the ordinary crane methods. In the Rotterdam scheme of 72 flats the steelwork was started late in November, and by May the flats were let and occupied, in spite of a period of severe frost in December. A certain degree of credit for this rapid building can be given to the use of wood infilling and sheet steel facing, but the end walls were brick faced and the interiors were plastered, so that it was not entirely "dry" building.

INTERNATIONAL BUILDING REGULATIONS

A valuable survey of the building codes affecting steel-framed buildings in the principal countries of the world is given in a paper "International Regulations for the Use of Steel in Buildings" by Monsieur L. G. Rucquoi. A table of permitted live load allowances on floors shows that these vary in different countries by as much as 25 per cent. The variation in allowances for wind pressures is as much as 200 per cent., though this is understandable in view of the present uncertain knowledge of the true effects of wind pressures on structures.

M. Rucquoi suggests the desirability of international agreement on the question of allowable working stresses in structures; and that the abolition of obsolete specifications will lead to more economical design and the fixing of a universal code will lead to a wider range of competition among fabricators.

While a good case could be made out for an international standard, it is of far greater importance to obtain national standards or, for the British Empire, imperial standards as a first step. It is not necessary to repeat here the arguments—sufficiently stated in the past—in favour of a national building code. The desirability of such a code has long been recognised by architects and engineers; only the inertia of government and local government hinders its creation. Since steelwork lends itself well to exact calculation, it is possible that a code of desirable allowances, agreed internationally by engineers for steelwork, might lead to its adoption nationally; and an agreed international steelwork code would certainly prove the thin edge of the wedge of a general building code.

M. Rucquoi summarises the qualities of a good code somewhat as follows: the first aim is to ensure safety; a good code must be conservative so that it does not go beyond the theories and formulæ that have been duly proven; frequent revisions based on the work of active and competent committees are of vital necessity; the same factors of safety must be imposed for all structural systems.

TYPES OF STEEL FRAME

In a paper entitled "Rigid Frames in Steel Structures," Professor Dr.-Ing. H. Maier-Leibnitz gave a useful analysis of the different types of steel-framed structures. Architects will find his diagrams more useful than his paper in which he has argued closely the scientific basis of each type. He dealt more fully with the large span hangar-type of structure than with the multi-floor type.

It is, however, interesting to find an engineer prefacing a paper with the remarks that "In accordance with modern ideas it is necessary that none but æsthetically satisfying rooms and structures must be created. The covering of the roof, the walls, the windows, the skylights and the supporting framework must be useful, beautiful, and in harmony with each other."

THE VIERENDEEL TRUSS

The Vierendeel truss is a rare form of deep horizontal girder that has particular interest to members of the R.I.B.A. since it has been used on the new building in Portland Place. The paper in which it is described ("The Design and Applications of the Vierendeel Truss") was by Mr. P. C. C. Hausser who, with his partner Mr. R. T. James, is structural engineer for the new building.

The Vierendeel truss is named after a Belgian professor who first applied the principles of rigid frame construction to bridges some 35 years ago. The truss is distinguished fundamentally from the ordinary lattice or triangulated truss in that it is a rigid frame structure composed of rectangular panels without diagonal bracing. In designing the lattice girder, based on a system of triangulation, it is commonly assumed that the members have pin joints at their ends; little allowance is made for the lateral rigidity of the joints. In the Vierendeel truss the diagonal bracing is omitted and the horizontal and vertical members and the joints between them stiffened up sufficiently to take the bending moments in these members.

The advantages claimed for this truss are: (1) The stresses in the members can be more accurately determined than in a triangulated truss; (2) the truss is stiffer than a triangulated truss; (3) it can be made more pleasing in appearance; (4) in building work the absence of diagonals enables doors and windows to be run through the truss without difficulty; (5) it is particularly suited to reinforced concrete, which does not lend itself readily to triangulated trusses.

In the new R.I.B.A. building it was necessary to carry a row of offices over the north side of the Exhibition Hall. These offices might in the future be converted to additional stack room space for the Library. A large girder had therefore to span 58 feet 9 inches to carry this possible load above the Exhibition Hall. At the same time, since windows had to be provided, a diagonally braced lattice girder was impracticable. A Vierendeel truss was adopted, 10 feet 7 inches in depth, and designed to carry a total load of 116 tons. It is in five bays each containing a window.

SOME OTHER PAPERS

A competition for a new Grand Palais exhibition hall was recently held in Paris in which one of the conditions was that a space of 60 acres had to be roofed without intermediate supports. As is not uncommon in competitions the most interesting and striking design was ruled "hors concours" by the jury. This was submitted by MM. Beaudoin and Lods, the architects responsible for the Drancy housing scheme. Their building was circular in plan and consisted of an external frame terminating in a flat ring 1,635 feet in diameter and 165 feet above the ground. From this ring the roof was suspended by chains. The walls consisted of enormous sliding screens of glass and steel so that any part or the whole of the wall space could be opened. This building was described in a paper by M. L. Icre.

The recent D.S.I.R. experiments on full scale framed structures were described in a paper by Dr. J. F. Baker. These have already been published in the Second Steel Structures Report.

For those interested in bridge design a paper on "Long Span Bridges," by Mr. Ralph Freeman, who designed the Sydney Harbour Bridge, was of interest.

Copies of the papers read at the Congress have been placed in the R.I.B.A. Library.

TEMPERATURE RISE IN HYDRATING CONCRETE

Those who are interested in concrete technique should study a technical paper,* recently issued by the Building Research Station, which describes investigations into the rise in temperature in large masses of concrete when setting. It is well known that the heat evolved may be considerable, the resulting expansion and subsequent contraction on cooling setting up stresses powerful enough to cause serious cracking. The matter is perhaps of greater moment to the engineer than to the architect, since trouble is more likely to arise from this cause in massive structures, such as bridges, dams and retaining walls, than in the types of building with which the architect is more familiar. It appears that it is not uncommon for very elaborate precautions to be taken to avoid the risk of cracking from this cause. With the use of modern cements having comparatively short setting times this trouble is tending to become aggravated. At the same time it seems likely that the generation of heat may be controlled sufficiently to allow a more free use of concrete in frosty weather. The report is a preliminary study of a problem of no small importance in concrete technique; further investigations and observations are being made.

* *Temperature Rise in Hydrating Concrete.* D.S.I.R. Building Research Technical Paper No. 15. H.M. Stationery Office. Price 1s. 3d.

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Book Reviews

ENGLISH INNS*

BY BASIL OLIVER [F].

One way—but, in my opinion, an unsatisfactory way—of noticing a new book is for the reviewer to write about the subject generally with only a passing reference to the author and his work at the end, and, if he is lucky, at the beginning as well. My interpretation of the purpose of a review is to tell the reader what the book contains and to commend it when it so deserves.

The important fact about the present book is value for money. It is produced with what may justly be described as a "star cast," consisting of Professor Richardson in the *rôle* of author, Sir Edwin Lutyens as *compère*, with *décor* by Professor Randolph Schwabe (coloured frontispiece), Mr. Brian Cook (jacket and pen-and-ink drawings), and others, including a large number of charming performances by the very gifted *troupe* of photographers assembled by those experienced *impresarios*, Messrs. B. T. Batsford, Ltd. The photographers have made many a pleasing new picture out of a familiar old subject, and Mr. Cook's drawings are uniformly good.

It is nearly nine years since the publication (at approximately treble the present price) of Messrs. A. E. Richardson's and Mr. H. D. Eberlein's *The English Inn Past and Present*, but this is now out of print. If possessors of this earlier book are asking themselves whether there is any overlapping, the answer is "very little." As the author remarks, "It is a far cry from *The Tabard* to *The Cumberland*," and even with such a wealth of material it would have been mistaken policy to have omitted the outstanding examples of our heritage of fine old English inns. Therefore *The George*, Glastonbury; *The Angel* and *The George*, Grantham; *The Dolphin*, Heigham (not Higham), Norwich; *The White Hart*, Scole; *The Haycock*, Wansford; *The George*, Norton St. Philip; *The George*, Southwark; *The Star*, Alfriston; *The Fighting Cocks*, St. Albans; *The Talbot*, Oundle; *The Feathers*, Ludlow; *The Bear and Billet* and *The Falcon*, Chester; *The Falstaff*, Canterbury; *The Lygon Arms* and *The Fish Inn*, Broadway; *The George*, Salisbury; *The Bull*, Rochester; *The Bridge Inn*, Shillingford; *The Bell*, Stilton; *The New Inn*, Gloucester; *The King's Head*, Aylesbury; and a few others of lesser architectural interest, are rightly included. In all cases where there is repetition of subject, either new photographs have been used or Mr. Brian Cook's attractive drawings have been substituted.

Both books have chapters on Signs and on Touring, but the present work has one very engaging feature, lacking in the earlier one—i.e., a chapter devoted to *The Inn in Literature*, with excerpts from the English authors from Langland to Surtees.

In his sprightly Foreword, Sir Edwin Lutyens deservedly smites that "dotty old woman D.O.R.A." (though she seems to have nine lives), and he also has something trenchant to say about "olde worlde" creations which are still unfortunately so dear to the hearts of certain brewery companies (who ought to know better), and to speculative builders (who will before long, it is to be hoped, be educated out of this kind of nonsense). When so distinguished an authority gives it as his opinion that "olde worlde" buildings ". . . are as objectionable and as needless as are the ultra-modern, in that both deface the countryside . . ." all concerned should ponder well his words, for they are undoubtedly true.

The author's vivacity has in print much of the same tonic effect as meeting him in the flesh. His two opening paragraphs are perhaps the best in the book and he quotes many humourous incidents of inn life. His inclusion of two plates of "Dora's England. The afternoon vigil before opening time" is an example of his very human outlook. His stories of John Taylor, "Poeta Aquaticus," waterman, wanderer, innkeeper, Royalist, controversialist, and pamphleteer, are highly diverting, especially Taylor's account of a sleepless night battling with "an Ethopian army of fleas." On another occasion, when this seventeenth-century worthy was dissatisfied with his treatment by a Daventry landlady, he made elegant reference in print to the "worte on her snowte," and advised travellers generally "to balke that inn," but the unfortunate adventures, about a century and a half later, of C. P. Moritz, a wandering German pastor—evidently one of the pioneer hikers—were not to the credit of the innkeeping class of his day. Because he chose to walk he was treated like a tramp! Unlike Sir Thomas Overbury, he would have been the last person to have described a landlord as "a mixture of double beer and fellowship," but Moritz sometimes got his own back with disobliging servants. At Windsor, on one occasion, after a very painful stay, he administered a suitable rebuff both to the waiter and to a disagreeable maid who accosted him at the door with "Pray remember the chamber-maid," to which his retort was "Yes, yes, I shall long remember your most ill-mannered behaviour, and shameful incivility; and so I gave her nothing."

We are also reminded of an experience which Samuel Pepys had to endure when he and his party were forced to lie the night at an alehouse on Salisbury Plain, where, on rising, they found "the beds good but lousy, which made us merry." But that was three centuries ago and now we have a different sense of humour!

Professor Richardson, in his concluding words of this fascinating book, writes: "The inns of the land are infinite in variety, and their study and exploration is a never-ending pursuit. As they are the centres of the people's social life, from the small hamlet to the great cities, they can reveal the atmosphere of countryside and town, and throw much light on the feelings, character and spirit of the English people, their steady patience, their calm steadfastness, and their quiet, but lively sense of humour and enjoyment."

**The Old Inns of England.* By A. E. Richardson. London. Batsford. 1934. 7s. 6d.

ENGLISH CATHEDRALS.

THE CATHEDRALS OF ENGLAND. *By Harry Batsford and Charles Fry; with a foreword by Hugh Walpole. Illustrated from drawings by Brian Cook and from photographs. London: Batsford. 7s. 6d.*

A new book on English Cathedrals reminds us of its much valued predecessors, of *Winkle's Cathedrals*, with its steel engravings and plates, a delightful work in its day both for the professions and laities of the Church and Architecture; of the still invaluable *Murray's Handbook* in its white covers with Orlando Jewitt's masterpieces of the wood-engravers' art, and the authoritative descriptions and plans of Mr. King and others; and in a later generation, now evaporating, the folios containing the *Builder* series of surveys, plans, views, sketches, with uniformly competent descriptions due to the editorship of Mr. Statham. There are others—the bibliography would be considerable—but these three remain as standards, all still in demand though only obtainable as rare second-hands.

The opportunity therefore exists for a new book to which is open the facilities of photographic reproduction, with its extraordinary economy of cost, compared with either the steel engravings of Winkle, the wood-cuts of Jewitt, or the drawings of Statham's draughtsmen. Of photography the book under review takes as full advantage as its format permits; in fact the 133 photographic pages supply its attraction and justification.

The plans, to a uniform reduction of 100 ft. to the inch, are much less satisfactory either as explanations of the photographs and descriptions or as guidance to a visitor. It must not be considered hyper-critical to advocate the illustrative value of the plan of a Cathedral and, we will be brave to add, the necessity of indicating the lines of the main arcades, and if possible of the vaults, as these are the factors in which the plan exists. The absence of these essentials disembowels the walls and deprives the plans of a subtle, an almost unconscious or undesigned beauty of pattern form.

The book has a worthy frontispiece in Mackenzie's marvellous drawing of Lincoln—now at South Kensington, a drawing that recalls the school of architectural artists of the pre-photographic process epoch, in which even the great Turner may be remembered, with Prout, David Robert, Leitch and others of the noble fraternity that delighted in recording the beauties of architecture. For their art, in spite of all else, photography is but a cheap substitute. Draughtsmanship is here represented by some 32 scrappy pen notes accidentally scattered in the pages.

After the frontispiece comes Mr. Hugh Walpole's foreword expressing his deep and poignant gratitude for the emotions created by the book, as his life has been largely pervaded by Cathedral associations.

The Cathedrals are here classified as 26 Major Cathedrals, 13 Parish Church Cathedrals and three Modern, *viz.* Truro, Liverpool and Guildford—the former group being arranged alphabetically from Bristol to York.

The history of the foundations is dealt with briefly and that of the buildings partially, the architectural effects call for many superlative expressions and the works of the Victorians, early, middle and late, with consistent depreciation.

The vastness of the subject, the scope for historical analysis of the wonderful development of mediæval art during the semi-millennium and the great interest of the ecclesiastical organisation of the Cathedral buildings would seem to make it almost impossible to deal with the subject with the brevity demanded by this volume. The classification of the nine Cathedrals of the old foundation—*i.e.* non-conventual and therefore not dissolved by Henry VIII, together with the five new sees that he founded—from those of the new foundation of his statutes ought to be remembered and noted. That monastic Cathedrals, where the Bishop was Abbot, are almost peculiar to England and Germany; that we have modern foundations in ancient buildings at Manchester, Ripon, St. Albans, Southwell and Southwark; besides a combination of new and old at Truro and the altogether fresh ventures of Liverpool and Guildford should not be overlooked in an analytical list.

It may be of service to furnish such a classification of the 42 Cathedrals.

9. Cathedrals of the old foundation (non-conventual)—York, London, Chichester, Exeter, Hereford, Lichfield, Lincoln, Salisbury, Wells (also four Welsh—Bangor, Llandaff, St. Asaph, St. David's).

8. Cathedrals of new foundation (after the dissolution)—All Benedictine except Carlisle, which was Augustinian, —Canterbury, Durham, Winchester, Ely, Norwich, Rochester, Worcester.

5. New Sees established by Henry VIII—Bristol, Chester, Gloucester, Oxford, Peterborough.

5. Modern in old buildings—Manchester, Ripon, St. Albans, Southwell, Southwark.

2. Modern in new buildings—Truro, Liverpool.

1. Projected—Guildford.

12. Parish Church Cathedrals—Birmingham, Blackburn, Bradford, Chelmsford, Coventry, Derby, Leicester, Newcastle, Portsmouth, St. Edmundsbury, Sheffield, Wakefield.

BERESFORD PITE [*F.*]

THE FOUNDATION OF CAIRO.

THE FOUNDATION OF CAIRO, *by K. A. C. Creswell (Hon. A.). Cairo. Bulletin of the Faculty of Arts. Vol. 1 part 2, 1933.*

This small monograph, reprinted from the *Bulletin of the Faculty of Arts* (Cairo), is prepared with the author's habitual care and scholarship. Although the town of Fustat, south of the modern city, was founded soon after the Moslem conquest of Egypt in A.D. 640 near the still older town called "Babylon" by the Greeks, Cairo itself dates from three centuries later. It was in the year 969 that the Fatimid prince, Al-Mu'izz, whose capital was at Qairawan in Tunis, achieved his ambition of conquering Egypt, "the aim of his life, for which he had amassed a fortune of 24 million dinars and spent two years in digging wells on the road to Alexandria." Possibly influenced by favourable astrological portents, he left Qairawan on 5 February 969 and arrived at Giza opposite Cairo on 6 July. He totally defeated the Egyptian army, and the site of the new city was marked out that very night by Gohar, the Prime Minister and Commander-in-Chief of the victorious army, on a sandy plain between the Nile and the steep Muqattam Hills. The new town was about 1,200 yards square, enclosed by a wide brick wall of very large sun-dried bricks. It contained two palaces, government offices, barracks, a library, a mint, an arsenal, and other public buildings. It was a fortress of some strength with seven gates, all of which have since disappeared though the names of three of them are perpetuated in later medieval gates erected just outside the line of the old walls. The city was first christened Al-Mansuriya (="The Victorious") and appears to have acquired its modern Arabic name Al-Qahira ("=The Triumphant")

some four years later. The relation of the old enclosure to the medieval walls and gates of Cairo, still preserved to some extent, is indicated on an excellent plan. The monograph concludes with a very complete bibliography, containing no fewer than thirteen references to authorities earlier than A.D. 1500.

M. S. Briggs [*F.*].

HOUSING IN NEW YORK

State of New York: Report of the State Board of Housing. (*Legislative document, 1934, No. 41.*) *Albany, U.S.A. 1934.*

This report covers the work of the State Board during 1933 and is a survey which many English housing authorities will find very instructive. The main part of the report is a statistical and architectural review of the year's work, illustrated by photographs and plans of buildings.

To English minds the use of enclosed courtyards in tenement schemes will seem rather reactionary. In a scheme in Manhattan, by name, Knickerbocker Village, on a site of 219,736 square feet, 45 per cent. of the land is covered by two large twelve story tenement blocks built round courtyards or "Parks" approximately 120 feet by 200 feet, which can hardly receive sufficient sun and air to make them really congenial open spaces; but the problem of congestion in New York is obviously so great that it may not be possible to reach a higher standard of open planning in the centre.

The schemes illustrated have been financed by "limited dividend" corporations who have been able to develop projects representing an investment of approximately $30,000,000 in accordance with standards which, as the report says, "promise to insure their stability for many years to come." The report favours housing by limited dividend corporations as an encouragement to private enterprise, "to exercise its ingenuity in this financially unattractive field in combining investment with responsibility for continued management" and it also points out the advantage of housing ventures free from political influences.

It points out, however, that limited dividend corporations have not been able to operate on a sufficiently large scale to undertake a comprehensive plan for the reconstruction of blighted areas *as a whole* and accordingly recommends the formation of Municipal Housing Authorities as a supplementary agency. "Slum clearance is primarily a problem of public finance and not of private finance," says the report and adds that a comprehensive housing policy is necessary so that the functions of state and municipality may be correlated; these functions include the "city plan, the building of parks, highways, transit lines streets and other public facilities, etc. The objection which we have cited to the schemes illustrated in the report, namely the overcrowding of sites, is due most probably to the lack of correlation making it difficult for any one private corporation to obtain concessions over large enough areas and the necessity of obtaining a maximum return even at the cost of continued overcrowding from development on confined sites.

The report is a valuable document as exemplifying the manner in which New York is dealing with problems similar to those which trouble us in this country.

NORFOLK MONASTERIES

The Monastic Remains of Norfolk and Suffolk. *By Claude J. W. Messent. Norwich: H. W. Hunt. 1934. 7s. 6d.*

This is the fourth of Mr. Messent's interesting books on Norfolk buildings and, like his previous works on churches and cottages and farmhouses, is illustrated by reproductions of his own drawings. Mr. Messent's drawings set the critic an interesting problem. Superficially they seem crude, the penmanship is hesitating and the perspective not exactly according to the rules; but the more one looks at Mr. Messent's drawings the less these things count and the more it is realised how close the drawings are as interpretations of all the things that really matter. Who cares about perspective? Certainly the buildings themselves, if they could express an opinion, would show that the older they get the more they try to confound the artist and his rules by twisting themselves into most inaccurate shapes. Mr. Messent's drawings have a quite genuine character, which can be described as "primitive," that comes from sympathy rather than meticulous knowledge, although we don't doubt that the knowledge is there also, and they give an excellent idea of the materials and condition of the buildings illustrated.

The drawings are, however, only illustrations to a useful text, consisting of short and clear notes on over one hundred and eighty Norfolk monastic buildings. The notes, which are in part derived from Taylor's *Index Monasticus* and other authorities as well as Mr. Messent's own observation, are arranged alphabetically, so reference is easy, and there are plenty of cross-references when any place has alternative names. All Mr. Messent's work is worth doing, and he deserves the thanks of those in Norfolk and everyone else for doing it so keenly and sympathetically.

A MULTILINGUAL GLOSSARY OF TOWN PLANNING AND HOUSING

International Glossary of Technical Terms Used in Housing and Town Planning. [In English, French, German and Italian.] *London: International Federation for Housing and Town Planning. 1934. 5s. (To members of affiliated Societies, 2s. 6d.)*

This glossary is the work of a sub-committee of the Federation, the members of which are Professor A. Bruggeman, Mr. G. L. Pepler, Dr. R. Schmidt and Dr. Virgilio Testa, with Mr. H. Chapman, who has edited the work. It is not intended to be a dictionary, neither is it intended to include all the terms used in housing and town planning, for the equivalents of many of these can be found quite clearly stated in an ordinary bilingual dictionary. It is a handy reference work in four languages (English, French, German and Italian), to enable one to find quickly equivalents or definitions of housing and town planning terms not usually included in non-technical bilingual dictionaries.

Reference to the work is quite a simple matter, as all the terms are in a single list in alphabetical order and therefore an index is unnecessary. A reader or writer requiring to find an equivalent for a particular term has only to refer to this term in its alphabetical order, where he will find all the equivalents in the three other languages, and, if necessary, a definition also.

Accessions to the Library

1933-1934—XII

INCORPORATING NOTES ON RECENT PURCHASES

(These Notes are published without prejudice to a further and more detailed criticism.)

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Books presented by Publisher or Author marked R.
Books purchased marked P.
** Books of which one copy at least is in the Loan Library.*

ARCHITECTURE

VITRUVIUS POLLIO (MARCUS)
*Vitruvius on architecture. Edited from the Harleian MS. 2767 and translated into English by F. Granger.
Vol. 2. London: Heinemann. 1934. 10s. P.
A copy of this work has now been added to the Loan Library.

BLACKBURNE (E. L.) *Editor*
The Mason's, bricklayer's, plasterer's and decorator's practical guide . . . with examples of foundations, domes, . . . bridges, walls, vaulting *etc.*
4o. 11″. iv+265 pp. *and* 92 plates. London: J. Hagger. [18—.] 8s. 6d. P.

HISTORY

PUGIN (AUGUSTUS)
Specimens of the architecture of Normandy. New edition edited by R. P. Spiers. 4o. London. 1874. *Presented by Miss Bridgman.*

BUXTON (D. R.)
*Russian mediæval architecture. 1934.
A copy of this work has been added to the Loan Library.

DRAWING

JOPLING (JOSEPH)
The Practice of isometric perspective.
2nd Edn. 8¾″. viii+90 pp. London: M. Taylor. 1835. 6s. 6d. P.

BUILDING TYPES

SCOTT (G. G.)
Remarks on secular and domestic architecture.
8o. London. 1858. *Presented by Miss Bridgman.*

(CIVIL)

VACHON (MARUS)
Le Nouvel Hôtel de Ville de Paris. 1872–1900.
p.fo. 14″. 255 pp. Paris: Conseil Municipal. 1900. 15s. P.

LANCHESTER (H. R.)
The Architectural ornamentation of sailing ships considered historically. (Thesis for R.I.B.A. final examination, June 1934.)
8o. 9″. Typescript. 1934. *Presented by the author.*

CENTRAL BUREAU OF HOSPITAL INFORMATION
Memoranda (1929–34) on matters of administrative interest to hospitals.
The Central Bureau has given the Library a complete set of all its published memoranda, many of which are of direct interests to architects. Among the subjects dealt with are building costs, the comparative qualities of equipment and materials, maintenance costs, etc.
The Library will receive all future memoranda issued by the Bureau.

THE HOSPITALS YEAR BOOK, 1934
Issued by the Joint Council of the Order of St. John and the British Red Cross Society and the British Hospitals Association.
(*Including:*
A list of new buildings and extensions (voluntary and municipal) with costs, and memoranda issued by the Central Bureau of Hospital information.

(ECCLESIASTICAL)

BRITTON (J.)
Cathedral antiquities, 1814–35.
7 vols. 4o. London. 1814-35. *Presented by Miss Bridgman.*

BROWN (R.)
Sacred architecture, its use, progress and present state.
4o. London. 1845. *Presented by Miss Bridgman.*

MACKMURDO (A. H.)
Wren's city churches.
9¼″. viii+133 pp. Orpington: G. Allen. 1883. 5s. P.

FOLKESTONE: PARISH CHURCH
The Parish church, Folkestone. S. Mary and S. Eanswythe.
pam. 8½″. Folkestone. [193-.] R.

SINCLAIR (T. S.)
The Story of Cirencester parish church.
2nd Edn. pam. 7″. Cirencester. [19—.] 6d. *Presented.*

MESSENT (C. J. W.)
*The Monastic remains of Norfolk and Suffolk.
8½″. 115 pp. Norwich: Hunt. 1934. 7s. 6d. (2). *Presented by the author.*

(DOMESTIC)

INTERNATIONAL FEDERATION FOR HOUSING AND TOWN PLANNING
*International glossary of technical terms used in housing and town planning. London. [1934.] *Presented by the Federation* (2).

NEW YORK, *State:* BOARD OF HOUSING
Report of the State Board of Housing to Governor H. H. Lehman and to the Legislature of the State of New York. (Legislative document (1934)—No. 41.) 9″. 62 pp. Albany. 1934. R.

NATIONAL HOUSING COMMITTEE
*A National housing policy. Report of the . . . committee.
10″. 85 pp. London: H.M.S.O. 1934. 2s. (2). *Presented by the Committee.*

ESTATES GAZETTE *Ltd. Publisher*
New houses: a guide to building estates round London.
pam. fo. 13¾″. London: Estates Gazette. 1934. 6d. P.

BIRCH (JOHN)
Country architecture . . . being a series of executed works and designs for buildings connected with landed property *etc.*
4o. 12¼″. 75 pp. *and* 49 plates. Edinburgh *and* London: Blackwood. 1874. 8s. P.

HALFPENNY (WILLIAM)
Useful architecture . . . for erecting parsonage-houses, farm-houses and inns *etc.*
3rd Edn. 8o. 8″. 75 pp. *and* 21 engraved plates. London: *Printed for* R. Sayer. 1760. 8s. 6d. P.

SWOBODA (KARL M.)
Römische und Romanische Paläste.
2nd Edn. 10½″. 279 pp. *and* 16 plates. Vienna: A. Schroll. 1924. 18s. P.

MILLER (J.)
The Country gentleman's architect . . . new designs for cottages, farm-houses . . . and ornamental wooden gates *etc.*
4o. 10½″. [2]+[32] pp. *and* 32 engraved plates. London: J. Taylor, *printer*. 1805. 15s. P.

POCOCK (W. F.)
Architectural designs for rustic cottages, picturesque dwellings, villas, etc., with . . . plans and descriptions . . . critical observations of their style and character *etc.*
4o. 11¼″. 36 pp. *and* 33 engraved plates. London: J. Taylor, *printer*. 1807. 25s. P.

RANDALL (JAMES)
A Collection of architectural designs for mansions, casinos, villas, lodges, and cottages from original drawings.
fo. 16½″. vi+13 pp. 34 aquatints. London: *Printed for* J. Taylor. 1806. 21s. P.

TOY (SIDNEY)
The Round castles of Cornwall. [*From* Archæologia, LXXXIII.]
pam. 4o. 11¾″. Oxford. 1933. *Presented by the author.*

DUTTON (RALPH) *and* HOLDEN (ANGUS)
English country houses open to the public.
7″. 221 pp. London: Allen and Unwin. 1934. 5s. P.

WINBOLT (S. E.)
Roman villa site, East Cliff, Folkestone.
2nd Edn. pam. 7½″. Folkestone. 1924. *Presented.*

BARBER (WILLIAM)
Farm buildings or rural economy, containing designs for cottages, farm-houses, lodges, farm-yards . . . also a description of the mode of building in pisé.
4o. 13½″. 13 pp. *and* 6 aquatints. London: *Priv. printed.* 1802. *Bound with* Malton (James). An Essay on British cottage architecture.

BUSBY (C. A.)
A Series of designs for villas and country houses . . . with plans and explanations to each.
4o. 11½″. 20 pp. *and* 24 plates. London: J. Taylor, *printer.* 1808. 7s. 6d. P.

GANDY (JOSEPH)
Designs for cottages, cottage farms and other rural buildings, including entrance gates and lodges.
4o. 11¾″. x+27 pp. *and* 43 aquatints. London: *Printed for* J. Harding. 1805. 25s. P.

MALTON (JAMES)
An Essay on British cottage architecture . . . supported by fourteen designs with their ichnography or plans, laid down to scale *etc.*
4o. 13½″. 27 pp. *and* 21 aquatints. London: Hookham and Carpenter. 1798. £3 3s. P.

PACKE (JOSE MAC)
Oikioia or, nutshells: being ichnographic distributions for small villas. 4o. 8¾″. 89 pp. *and* 25 engraved plates (plans). London: *Priv. printed.* 1785. 7s. 6d. P.

DEARN (T. D. W.)
Designs for lodges and entrances to parks, paddocks and pleasure-grounds in the gothic, cottage and fancy styles.
4o. 11¾″. [vi]+19 pp. *and* 20 aquatints. London: J. Taylor. 1823. *Bound with* Gandy (Joseph). Designs for cottages *etc.*

HALFPENNY (JOHN *and* WILLIAM)
The Country gentleman's pocket companion and builder's assistant for rural decorative architecture.
8o. 8″. 14 pp. *and* 25 engraved plates. London: *Printed for* R. Sayer. 1753. 15s. P.

ALLIED ARTS

GILL (ERIC)
*Art and a changing civilisation. (The Twentieth Century Library. Edited by V. K. K. Menon.)
7¼″. xi+158 pp. London: John Lane. 1934. 2s. 6d. P. (2).

PEIRCE (HAYFORD) *and* TYLER (ROYALL)
L'Art Byzantin.
Vol. ii. L'Empire au VI^e^ siècle. 4o. Paris. 1934. £4 15s. P.

VICTORIA AND ALBERT MUSEUM
Review of principal acquisitions during the year 1933.

ARCHÆOLOGY

BARRACLOUGH (GEOFFREY)
Public Notaries and the papal curia. (British School at Rome.)
4o. 10″. x+288 pp. London: Macmillan. 1934.
Presented by the Faculty of Archæology, History and Letters of the B.S.R.

STEVENS (G. P.)
The Fountain of Peirene in the time of Herodes Atticus. [*Reprinted from* the American Journal of Archæology, vol. xxxviii (1934), no. 1.]
4o. 11″. [Washington] 1934. *Presented by the author.*

GOMME (G. L.)
Index of archæological papers, 1665–1890.
8½″. xi+910 pp. London: Constable. 1907. [10s. 6d. P.

BUILDING SCIENCE

KNOOP (DOUGLAS) *and* JONES (G. P.)
The Careglwyd building account, 1636. (Anglesey Antiquarian Society and Field Club.)
pam. 8½″. (Liverpool.) [1934.] *Presented by Professor Knoop.*

MATERIALS

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH: FOREST PRODUCTS RESEARCH
*Leaflet No. 3. Lyctus beetles and their control.
pam. 9½″. London: H.M.S.O. 1930.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH: FOREST PRODUCTS RESEARCH
Leaflet No. 4. The Death-watch beetle.
pam. 9½″. London: H.M.S.O. Revised Dec. 1933.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH: FOREST PRODUCTS RESEARCH
*Leaflet No. 8. The common furniture beetle.
pam. 9¾″. London: H.M.S.O. 1932.

CONSTRUCTION

CANTELL (M. T.)
* Practical designing in reinforced concrete. Part I.
A copy of the above work has been added to the Loan Library.

PUBLIC HEALTH

MINISTRY OF HEALTH
* Memorandum on the bed-bug and how to deal with it. (Memo. 180 Med.). pam. 9½″. London: H.M.S.O. 1934. 3d. P. (2).

MINISTRY OF HEALTH
[Public Health.] Reports on public health and medical subjects. No. 72. Report on the bed-bug.
9½″. 48 pp. London: H.M.S.O. 1934. 1s. P.

SANITARY SCIENCE AND EQUIPMENT

BRITISH STANDARDS INSTITUTION
No. 559. B.S. specification for electric signs.
pam. 8½″. London. 1934. 2s. R.

SMITH (F. C.)
*Warming buildings by electricity.
8½″. vii+162 pp. London: Spon. 1934. 8s. 6d. P. & R.

ALLIED SCIENCE

STORY (J. A.)
Traverse surveys.
7¼″. 88 pp. London: Lockwood & Son. 1934. 4s. 6d. P.

LEARNED SOCIETIES

JOURNAL OF ROMAN STUDIES. VOL. XXIV. PART I. 1934.

JOURNAL OF THE ROYAL SOCIETY OF ANTIQUARIES OF IRELAND. VOL. LXIV. PART I. JUNE 1934.
(*Including:* John Maher, Francis Place in Drogheda, Kilkenny and Waterford, *etc.*)

SCAPA
Annual report for 1933.
(*Including:* Notes and reports on—
Control of advertisements under planning schemes.
Advertisements on shop fronts.
Advertising and architecture.
Petrol filling stations.
House refuse.)

PERIODICAL

THE ARCHITECTURAL MAGAZINE
Vols. 2, 4, 6. 1836–38.
Presented by Mr. David Whyte (District Surveyor of Hampstead).

TOPOGRAPHY AND MAPS

CATTLE (J. T.)
A Short general history of Ruislip. (Published by the Ruislip Association.)
9½″. 32 pp. Ruislip. 1930. *Presented by Mr. F. H. Mansford.*

CRESWELL (K. A. C.)
The Foundation of Cairo. [*Extract from* The Bulletin of the Faculty of Arts. vol. I, pt. 2.]
pam. 9½″. Cairo. 1933. *Presented by the author.*

ORDNANCE SURVEY
Re-levelling of Greater London (1931–34). Abstract of Bench Marks, vol. xvii . . . by H. St. J. L. Winterbotham.
4o. 12″. 17 pp. *and* folding plan. Southampton. 1934. 10s. R.

TOWN AND COUNTRY PLANNING

THE LABOUR PARTY
Policy report no. 10. Up with the houses, down with the slums.
pam. 8½″. London. 1934. 2d. *Presented by the Labour Party.*

ARCHITECTS' UNEMPLOYMENT COMMITTEE *and* LONDON SOCIETY
Architects' emergency scheme. Exhibition of drawings and models of London and the provinces. 7 Bedford Square, W.C.1. June 1934.
pam. 8½″. London: London Society. 1934. 1s. R.

DRAWINGS

BURGES (WILLIAM)
Three grotesque designs for wood carving.
i. Frog with viol.
ii. Frog with stagbeetle.
iii. Frog with riding snail.
Presented by Sir W. Goscombe John, R.A.

NASH (JOSEPH)
The Royal Pavilion at Brighton, 1820–25.
(Books of aquatints, hand coloured.) P.

FLETCHER (HANSLIP)
R.I.B.A. Building, 9 Conduit Street. Main library.
D. 1934. P.

PHOTOGRAPHS

Photographs of
FOWLER (CHARLES). (Photograph of oil painting.)
HAYWARD (CHARLES FOWLER).
Presented by Mr. A. B. Hayward [L.].
TEULON (SAMUEL SANDERS).
Presented by Mr. Samuel M. Kirkman.
I'ANSON (EDWARD)
(President, 1886–88).
Presented by Miss Emma B. I'Anson.

Review of Periodicals

Within the self-imposed limit of these pages attempt is made in this review to refer to the more important articles in all the Journals received by the library. None of the journals mentioned are in the loan library, but the librarian will be pleased to give information about prices and where each journal can be obtained. Members can have photostat copies of particular articles made from journals in the library.

CIVIC BUILDINGS

ARCHITECTS' JOURNAL. *Vol. LXXX. No. 2062. 26 July.*
BUILDER. *Vol. CXLVII. No. 4773. 27 July.*
Slough Municipal Buildings Competition.

INDUSTRIAL

ARCHITECTURAL RECORD. *Vol. LXXVI. No. 1. July.*
A brewery, San Antonio, Texas.

ARCHITECTS' JOURNAL. *Vol. LXXX. No. 2061. 19 July.*
Pithead baths, illustrations of several examples in Yorkshire, Scotland, Lancs and South Wales. A very interesting new problem excellently solved under the supervision of the Miners' Welfare Committee's chief architect, J. H. Forshaw [*F.*]. The architects of the individual buildings are C. G. Kemp [*A.*], J. A. Dempster [*A.*], F. G. Frizzell [*A.*] and W. M. Traylor [*L.*].

TRANSPORT

ARCHITECTS' JOURNAL. *Vol. LXXX. No. 2061. 19 July.*
A motorists service station at Ilford. A modern building by Cameron Kirby [*A.*]. Very useful reference on planning.

BOUWKUNDIG WEEKBLAD. 1934. *No. 28. 14 July.*
Excellent buildings on the Rotterdam-Dordrecht electric railway.

SHOPS

ARCHITECTURAL RECORD. *Vol. LXXVI. No. 1. July.*
Shopping Centres. Article on planning departmental stores for quick service and good display.

HOSPITALS AND SANATORIA

BUILDER. *Vol. CXCVII. No. 4773. 23 July.*
Wembley Hospital, additions by H. Kenchington [*F.*], increasing accommodation from 20 to 54 beds by extension of women's wards, addition of private, isolation and observation wards.
Illustrations of a model and plans of a tuberculosis sanatorium by E. Weissmann.
Notes and analysis of a rural health station to provide hospital and clinic services to a scattered community.

ARCHITECTURAL RECORD. *Vol. LXXVI. No. 1. July.*
A very short article and the best photographs yet published of Aalto's Tuberculosis Sanatorium.

NURSES' HOME

ARCHITECTS' JOURNAL. *Vol. LXXX. No. 2063. 2 August.*

ARCHITECTURAL REVIEW. *Vol. LXXVII. No. 453. August.*
The new nurses' home for the Hospital for Sick Children, Great Ormond Street.

EXHIBITION BUILDINGS

ARCHITECTURE D'AUJOURD'HUI. *Vol. V. 4th series. No. 5. June.*

LA CONSTRUCTION MODERNE. *Vol. XLIX. No. 44. 29 July.*
Several of the designs submitted for the new Palais des Expositions in Paris to replace the old Trocadero. Other designs have already been recorded here. Also illustrations and notes on Exhibitions at Milan, Berlin and Antwerp.

THEATRE AND CINEMA

BYGGE KUNST. (OSLO). *Vol. XVI. No. 6. June.*
"Folkets Hus" Sarpsborg (Arne Pedersen). A small theatre with 900 seats on floor and gallery.

ARCHITECTURE D'ARJOURD'HUI. *Vol. V. 4th series. No. 5. June.*
A cinema in Paris with letting offices on upper floors (J. Desbouis), also Cinema Escurial at Nice.

SPORTS BUILDING AND SWIMMING POOLS

ARCHITECTURE D'AUJOURD'HUI. *Vol. V. 4th series. No. 5. June.*

A covered lawn tennis court at Auteuil.

ARCHITECTURE (N-Y). *Vol. LXX. No. 1. July.*

Jones Beach, State Park, Long Island. Swimming pool.

BUILDER. *Vol. CXLVII. No. 4773. 27 July.*

ARCHITECTS' JOURNAL. *Vol. LXXX. No. 2062. 26 July.*

The Empire Swimming Pool, Wembley (Owen Williams) and two baths at Roehampton (G. W. Smith).

SCHOOLS AND UNIVERSITY

CONSTRUCTION MODERNE. *Vol. XLIX. No. 43. 22 July.*

Nursery School at Gennevilliers (Seine) by M. F. Dumail.

LA CONSTRUCTION MODERNE. *Vol. XLIX. No. 44. 29 July.*

A large girls boarding school at Vitry S. Seine. One section of a large scheme of departmental schools. This school is for 100 girls between 6 and 13 years. The buildings are of brick.

ARCHITECT AND BUILDING NEWS. *Vol. CXXXIX. No. 3422. 20 July.*

Pinner Park Council School, Headstone Lane. Another of Mr. W. T. Curtis's [*F.*] excellent schools for the Middlesex County Council.

ARCHITECTURE (PARIS). *Vol. XLVII. No. 7. 15 July.*

The Chemistry and Natural Science building in the Ecole Normale Supérieure, Paris. (A Guilbert.) Excellent details of design for chemical equipment.

A medical school clinic, University of California. A large building for treatment of 200,000 medical and 50,000 dental out patients yearly. The structure is of steel specially designed to resist earthquakes.

LIBRARIES AND ART GALLERY

BUILDER. *Vol. CXLVII. No. 4772. 20 July.*

The Manchester Reference Library. (E. Vincent Harris.)

ARCHITECT AND BUILDING NEWS. *Vol. CXXXIX. No. 3422. 20 July.*

THE LIBRARY ASSOCIATION RECORD. *Vol. I. 4th series. No. 7. July.*

The Sheffield City Library and Art Gallery, an important building which is very well planned—a useful reference.

MUSEUM

ARCHITECTURE (PARIS). *Vol. XLVII. No. 7. 15 July.*

An important and well illustrated article on the rearrangement of the Louvre museum. Some brilliant simplification, most notably in *l'Escalier Daru*, at the head of which stands the Victory of Samothrace.

DOMESTIC

BUILDER. *Vol. CXLVII. No. 4772. 20 July.*

The Lawn Road Flats (Wells Coates). A very interesting block of "minimum" flats, *i.e.*, bed-sitting rooms with small dressing and bathrooms and kitchen pantry. The only flats of their type in England and deserving close study for their construction, planning and design.

BUILDER. *Vol. CXLVII. No. 4772. 20 July.*

Flats, Lower Road, Rotherhithe. (Stock, Page and Stock [*FF.*]).

CONSTRUCTION MODERNE. *Vol. XLIX. No. 42. 15 July.*

A large tenement scheme, Place de Vaugirard, Paris (M. Hennequet), described in detail and well illustrated.

ARCHITECTURE D'AUJOURD'HUI. *Vol. V. 4th Series. No. 5. June.*

The pilot's rest-house at Orly aerodrome (M. Thurin), a small simple building with bedrooms, common room, bar, etc.

HOTELS AND INNS

GAZETTE DES BEAUX ARTS. *Vol. XII. Series 6. No. 859. July.*

Hôtel Vendôme, an article by Boris Lossky on the Hôtel Vendôme and its architect, Alexandre Le Blond.

ARCHITECTURAL DESIGN E CONSTRUCTION. *Vol. IV. No. 9. July.*

Inn signs—a short article with many illustrations.

FARMS

BYGGE KUNST (OSLO). *Vol. XVI. No. 6. June.*

Farm buildings. School designs of dairy farms.

ARCHITECTURAL DETAILS

ARCHITECTURAL REVIEW. *Vol. LXXVI. No. 453. August.*

A supplement on timbers for decoration, some good illustrations.

CONSTRUCTION

CONSTRUCTION MODERNE. *Vol. XLIX. No. 42. 15 July.*

Designs submitted in a competition for the means of defence (*defense passive*) against aerial bombardment. Several ingenious schemes for subterranean shelters and armoured bomb-proof towers, etc. Article includes a map showing the distance of various places in France from Coblenz by air.

BOUWKUNDIG WEEKBLAD. *1934. No. 28. 14 July.*

Comparative drawings of chimney stacks of traditional forms and as required by a patent combined flue system "Shunt," in which each fire has its own flue for the height of two floors and then joins a common flue.

EQUIPMENT

ARCHITECTURAL RECORD. *Vol. LXXVI. No. 1. July.*

Technical supplement on electrical equipment in small houses.

TOWN PLANNING

JOURNAL OF THE INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. *Vol. LXI. No. 2. 17 July.*

Modern traffic control, a paper by the Sheffield City Engineer, of use as a reference for town planning.

HISTORICAL AND GENERAL

ARCHITECTURE (NEW YORK). *Vol. LXX. No. 1. July.*

A good article on the Brothers Asam, two baroque architects, who practised in Germany at the same time that the Adam brothers were working in England. The article is well illustrated.

ARCHITECTURE D'AUJOURD'HUI. *Vol. V. 4th Series. No. 5. June.*

Roumanian architecture, a series of articles on various buildings, mostly in Bucarest, including the Hotel Bellona, on the shores of the Black Sea.

ARCHITECTURAL REVIEW. *Vol. LXXVI. No. 453. August.*

"Riverside," a well illustrated and written study in the buildings and topography of the Thames from Hammersmith Bridge to Chiswick Church.

JOURNAL OF THE ROYAL ARCHITECTURAL INSTITUTE OF CANADA. *Vol. IX. No. 3.*

Full report of the proceedings of the twenty-fifth annual general meeting of the R.A.I.C.

Notes

R.I.B.A. NEW BUILDING FUND

CONTRIBUTIONS RECEIVED OR PROMISED

	£	s.	d.
Brought forward ..	11,190	10	2
Professor S. D. Adshead [*F.*] (Cost of two pedestals for busts of architects) ..	10	10	0
Mr. W. H. Ansell [*F.*] (First donation)	10	10	0
Messrs. H. V. Ashley [*F.*] and Winton Newman [*F.*]	21	1	0
Mr. T. S. Attlee [*A.*]	1	1	0
Mr. Ernest Bird [*F.*]	1	1	0
Mr. A. T. Bradford [*Subscriber*]	5	5	0
Mr. W. F. Dickinson [*F.*]	1	0	0
Mr. H. S. East [*A.*]	5	5	0
Messrs. Geo. Elkington and Son (George Elkington [*F.*], G. Leonard Elkington [*A.*] and Hylton B. Elkington [*A.*] ..	15	15	0
Mr. H. Alex. R. Ellis [*L.*]	3	3	0
Mr. Horace Farquharson [*F.*]	2	2	0
Mr. Henry M. Fletcher [*F.*]	21	0	0
Mr. Kenneth Glover [*F.*]	1	1	0
Mr. George F. Greenaway [*A.*] ..	1	1	0
Mr. T. S. Gregson [*F.*]	2	2	0
Mr. G. D. Gordon Hake [*F.*]	2	2	0
Mr. S. J. Halse [*F.*]	250	0	0
Mr. Arnold F. Hooper [*F.*]	1	1	0
Mr. A. G. A. Quibell [*L.*]	2	2	0
Mr. W. B. Stonebridge [*F.*]	1	1	0
Mr. John Swarbrick [*F.*]	5	5	0

Total received or promised, to 1 August, 1934, £11,553 17s. 2d.

THE CENTENARY

The Royal Institute has received the following greeting from the Royal Architectural Institute of Canada:—

The Royal Architectural Institute of Canada
Office of the President
1158 Beaver Hall Square,
Montreal, P.Q.
3 July 1934.

Sir Giles Gilbert Scott,
President of the R.I.B.A.,
9 Conduit Street,
London W.1.

SIR,—I have the honour of conveying to you, the Executive and Members of the Royal Institute of British Architects, the hearty congratulations of the Council and Members of the Royal Architectural Institute of Canada. We pay a tribute to the inspiration received and the constructive service rendered to the profession at large by your Institute during the hundred years of its honourable existence.

We recall with pleasure the very satisfactory relationship which has existed between our two bodies and look forward with confidence to its continuance.

Yours faithfully,
W. S. MAXWELL,
President of the Royal Architectural Institute of Canada.

THE PUBLIC RELATIONS COMMITTEE

When in May 1933 the R.I.B.A. Council appointed a Public Relations Committee the terms of reference were purposely made vague so that the new Committee would be able to explore thoroughly what was admittedly an indefinite field of operations. Clearly also the Committee would necessarily be somewhat different from the other R.I.B.A. Committees in that in some matters it would have to take direct action, though in those of major importance it would act by reports and recommendations to the Council in the usual way. It was accordingly left to the Committee to discover the extent and directions in which it could work and to evolve a suitable procedure.

This work has now been done and following suggestions by the Committee the Council have approved new terms of reference. The approved document is given below.

THE CONSTITUTION AND FUNCTIONS OF THE PUBLIC RELATIONS COMMITTEE

The principal functions of the Committee shall be :—

(1) To foster good relations between architects and the public.
(2) To encourage an appreciation for a high standard of architectural design by the public.
(3) To encourage and foster employment of architects on a much wider basis than at present.
(4) To achieve these objects by education, publicity and propaganda.
(5) That reports of the other R.I.B.A. Committees dealing with matters that might require action by the Public Relations Committee shall be automatically referred to them by the Secretary.
(6) That where the Council or any Committee or any Allied Society shall require any action to be taken by the Public Relations Committee, the matter shall be referred to the Public Relations Committee, via the Secretary.
(7) That the Public Relations Committee shall be the liaison Committee between the R.I.B.A. and the C.P.R.E.
(8) That any member of the Institute wishing to communicate with the Public Relations Committee on any matter that properly comes within its province shall do so through the Secretary of the Institute.
(9) Monthly reports on action taken to be submitted to the Executive Committee.

THE LIBRARY

The list of book pamphlets and periodical articles on hospital buildings which was prepared by the library some time ago has been revised and brought up to date; copies can be obtained on application to the Librarian. The list gives the names of some fifty books and articles and references to over forty buildings which have been illustrated and described in the English and foreign architectural papers during the last three or four years. Supplementary lists have also been compiled on maternity hospitals and wards, nurses homes and orphanages, and there are also up to date lists dealing with swimming baths and police stations which can be sent to any member who writes for them.

LOW STANDARDS OF BUILDING

Deputation to Health Minister

Sir Hilton Young, the Minister of Health, received a deputation yesterday from the Central Panels Committee of the C.P.R.E., the R.I.B.A. and the Institute of Builders.

The deputation was introduced by Sir Percy Hurd, M.P., and there were present :—Sir Percy Hurd, M.P., Mr. S. C. Ramsey [*F.*], Mr. A. L. Roberts [*F.*], Mr. E. Guy Dawber [*F.*], Sir Leslie Scott, K.C. [*Hon. A.*], Mr. G. H. Jack [*F.*], Mr. H. G. Griffin, and Mr. L. A. Peyman.

The deputation expressed the anxiety with which they viewed the "uglification" of the countryside due to the low standard still observed in many of the houses that were being erected. The matter was of growing importance, in view of the rapid increase in building that was now taking place, and was likely to continue. They desired in particular to draw the attention of the Minister to a report prepared by the Central Panels Committee containing recommendations for the improvement, and extended use, of the system of local advisory panels which had been made available to local authorities to assist them in dealing with the building plans submitted to them.

The deputation emphasized that the panels desired to work most cordially with the authorities and their officials, and not in any way to interfere with their powers or functions.

Sir Hilton Young, replying, said that he shared to the full the desire of the Central Panels Committee that everything practicable should be done to secure a high standard of building and preserve the beauty of the countryside. The deputation were, indeed, preaching to the converted. He was, however, glad to believe that there were already some signs of improvement as compared, for example, with building in Victorian times. He welcomed the assurances of the deputation that they were seeking to work in cordial co-operation with builders, and he thought that means of progress were to be found in this direction.

The deputation were aware that a circular had been issued to local authorities in commendation of the panel system, and he would continue to take all practical measures to bring to the attention of local authorities the useful assistance which they could obtain from the panels.

R.I.B.A. MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE

The Royal Institute of British Architects announce that the following Maintenance Scholarships have been awarded for the year 1934-1935:—

An Ordinary R.I.B.A. Maintenance Scholarship of £100 per annum to Mr. Ronald William Higg[illegible] of Birmingham.

The R.I.B.A. Fourth and Fifth Year Maintenance Scholarship of £100 per annum to Mr. Norman Edwin Block, of the Bartlett School of Architecture, University of London.

The following Scholarships have been renewed for a further period of one year:—

The R.I.B.A. Ordinary Maintenance Scholarship of £100 per annum awarded to Mr. E. F. Ward (Architectural Association School of Architecture, London) in 1932.

The Ralph Knott Memorial Maintenance Scholarship of £45 per annum at the Architectural Association School of Architecture, London, awarded to Mr. C. O. Tremeer in 1933.

CENTENARY OF THE STATE OF VICTORIA

The Secretary has received the following letter from the Royal Victorian Institute of Architects :—

53-55 Collins Place,
Melbourne, C.1.
4 June 1934.

Dear Sir Ian MacAlister,

The President (Mr. C. E. Serpell) and members of the Council of the Royal Victorian Institute of Architects have pleasure in extending to the members of the Royal Institute of British Architects an invitation to visit the State of Victoria and its capital city—Melbourne—during the holding of their Centenary Celebrations in the years 1934 and 1935.

Commencing in the early summer month of October 1934, and extending into 1935, the Centenary Celebrations will comprise an extensive series of ceremonies and pageants planned to reflect the rapid development of both the State of Victoria and the City of Melbourne.

The Council of the R.V.I.A. has forwarded you, under separate cover, copies of an illustrated brochure and other booklets setting out the proposals of the Centenary Council, which body has been appointed by a Special Act of Parliament of Victoria. It is not proposed, therefore, that this letter should discuss or set out in detail particulars regarding the elaborate celebrations and entertainments that have been planned to take place during the Centenary programme. For the purposes of this letter, however, it might be of interest to point out that the City of Melbourne ranks seventh in size of the Cities of the British Empire, it possessing a population of over 1,000,000 people and occupying an area of 250 square miles. The State of Victoria has a population of 1,820,360 and covers an area of 87,884 square miles.

It would be much appreciated if you will kindly bring this letter and its enclosures before the next general meeting of your members and also give prominence thereto through other appropriate channels.

The Royal Victorian Institute regrets that it is unable to undertake the payment of any travelling or hotel expenses of visitors to the Centenary Celebrations, but the members of the R.V.I.A. Council would be delighted to welcome any of your members who may find it convenient to accept this invitation and to arrange for their entertainment during the period of their visit.

Should you or any of your members desire to obtain further particulars regarding the Centenary Celebrations, my Council would be pleased to assist as far as practicable upon request.

With best wishes,

Yours faithfully,
John B. Islip, *Secretary.*

THE CAPE TECHNICAL COLLEGE BUILDING MATERIALS BUREAU

A Building Materials Bureau has been formed at the Cape Technical College, Longmarket Street, Cape Town, for the use of students in the college and also the architectural profession and building industry generally.

It is desired to make the Bureau as representative as possible and the co-operation of British manufacturers would be greatly appreciated. Literature, catalogues, samples and models for permanent exhibition would be gladly accepted.

MR. ROBERT ATKINSON [*F*.]

Mr. Robert Atkinson has been appointed Consultant Architect to the City Council of Lincoln to advise on the planning and architecture of the built-up part of the City.

J. R. WIGFULL [*F*.]

The University of Sheffield has conferred an honorary degree of M.A. upon Mr. James Wigfull in recognition of his services as honorary lecturer in the Department of Architecture at the University.

Correspondence

ELECTRIC SIGNS

P.O. Box 409,
Hongkong.

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—From this distance (Hongkong) it would appear that further attack upon the electric signs generally, and of Piccadilly Circus in particular, is contemplated by some Members of the Royal Institute and some of the periodicals devoted to architecture.

A perusal of past speeches and writings upon the electric signs does make one wonder if architects are harming their own profession, their writings and speeches being so freely sprinkled with the words "good taste," "vulgarity," "decency," "enlightened citizens," "decent people," "Piccadilly Circus the hub of the world's vulgarity," etc.: it is apparently forgotten that as offensive as these signs may be to some, they may be pleasing to others, and to be pleasing, or not, is the only vice or virtue they have.

"When the invasion reaches Westminster, perhaps our own authorities will deem it time to call a halt, so that poor John Citizen may have, at least, one refuge from this incessant luminous exhortation," is from a paper devoted to architecture.

Does John Citizen dislike them?

Based upon the expressions of pleasure which can be heard at Piccadilly Circus, the electric sign is liked by many. Colonials, when returning from leave, have said: "Went via India or Egypt, or Japan: saw the Taj Mahal, the Pyramids, or the chrysanthemums in blossom," and then their eyes light up with a look of joy when they speak of the signs of Piccadilly Circus. One Colonial, who had circuited the globe, described Piccadilly Circus as an oasis at the bottom of the architectural gloom of Regent Street.

I state as a fact, signs are easier for me to look at than anything I have seen from Rome to Fujiama and from Fujiama to the Statue of Liberty, and those who would legislate to forbid them are certainly trying to rob at least one person of joy. Such taste may be vulgar, low, common and improper to a Fellow of the Institute. I do not wish to force others to like them. Such endeavour would be as great a piece of impertinence as I consider it would be for them to endeavour to change my taste.

Surely it is only a question of good and bad taste; bad taste is what the other fellow has, and he has as much right to like a sign as the other fellow has to like Waterloo Bridge. It is not a question of food value as can be stated with sugar or vinegar, nor does it give off gases which may be dangerous to health as, it may be claimed, a faulty drain may do?

One eminent architect is reported as saying: "Those responsible for these things inflict a great deal of annoyance on the community and should be made to pay for it," another adding: "If being made to pay for it be meant in a punitive sense, perhaps some such punishment for those responsible for the advertisements, as being placed in the stocks in Piccadilly Circus or Leicester Square day and night for a month or so, might have good results." Might not "being placed in the stocks" also be applied by those who do not like the work of some of our architects and sculptors?

There is the architect who stated at the Royal Institute that he would like to smash them with a hammer. There may have been no justification for defacing Epstein's "Rima," but it should not be forgotten that these "young hooligans" merely put into practice a similar desire.—Yours faithfully,

GEO. W. GREY [*F*.]

Obituary

C. STANLEY PEACH [*F*.]

We regret to announce the death of Captain Charles Stanley Peach [*F*.], who for many years took a leading part in Institute affairs, rendering most valuable service in the innumerable duties which he undertook. His architectural training was received in the office of the late H. R. Gough [*F*.]. In his private practice, which started in 1884, he was the architect of many industrial buildings, including electricity generating stations at Grove Road, St. John's Wood; Eccleston Place, Horseferry Road, Duke Street, Marshall Street, City Road, and Wandsworth and Battersea in London, and stations for the municipalities of Oldham, Kirkcaldy, Kilmarnock, Ipswich, West Hartlepool and Weymouth, and offices for several London electricity supply companies, offices, factories and warehouses for the Oriental Carpet Manufacturers, Ltd., and printing works for W. H. Smith and the Sun Engraving Co.

Probably his best known building is the Stadium at Wimbledon, for the All-England Lawn Tennis Club. He also built over 40 homes for the Church of England Waifs and Strays Society.

During the war, when he was a Captain in the Artists Rifles, he was of great assistance to the R.I.B.A. in helping to place members of the profession in commissioned posts in the Royal Engineers and elsewhere, where their professional services could be of most value.

His practice will be carried on by his son-in-law, Major Harrington.

We hope to publish a more complete memoir in a later number of the JOURNAL.

SCHOOL NOTES

ARCHITECTURAL ASSOCIATION SCHOOL OF ARCHITECTURE

Annual Presentation of Prizes

The annual prize distribution of the Architectural Association School of Architecture took place on Friday, 13 July, the Hon. Humphrey Pakington [*F.*] (President) being in the chair. The prizes were distributed by Viscountess Leverhulme after an address had been given to the students by the Viscount Leverhulme.

The President in his address spoke of the school as the largest in the Empire, and reviewed not only the work of the year but the work of past students. He congratulated Mr. Raymond Erith and Mr. B. S. Hume on their success in the Stockholm Town Planning competition, Mr. John Grey and Mr. Martin-Smith, who were second in the Hornsey Town Hall competition, and Mr. Howard Robertson, who will be responsible for one of the individual room exhibits at the Royal Academy Exhibition of Industrial Art. Mr. Pakington also spoke for some time about the work of the staff. He regretted that two distinguished members of the staff, Mr. Rowland Pierce and Mr. G. A. Jellicoe, were leaving owing to the demands of their private practices, and called attention to the appointment of Mr. Jarrett as Warden, a newly created position. In welcoming Lord Leverhulme the President referred to his hereditary interest in architecture and the arts and spoke of the Leverhulme scholarships which allowed five students to be educated at the school.

Lord Leverhulme in his address said that nothing would have given his father more pleasure than to know that the Leverhulme Trustees had used part of the bequest in making a grant to this school. He said that his father's interest in architecture had dated from the time when, as a small boy, he had designed a rabbit hutch with a patent tray on top in which he hoped to grow food for the rabbits to feed on; and all through his life he had been busy altering the houses he lived in, drawing all his own plans to scale before he called in an architect. Lord Leverhulme then drew a comparison between the Architectural School at Liverpool, for which he and his father have done so much, and the Architectural Association School, and said that British architecture was all the better for the existence of two such outstanding schools in friendly rivalry. Dealing with the peculiar difficulties and responsibilities of an architect's work Lord Leverhulme said that one of the greatest was that the architect had to design a building that was not only artistic but would stand up. An artist could draw the human body with complete inaccuracy on the plea of escaping from photographic realism and get away with it, but the architect had to be practical. He also had to be a good business man as well as an artist, and he had to contend with the factor of the permanence and immovability of his completed work. With regard to the spoliation of the countryside by jerry-building, Lord Leverhulme said that on his estate in Cheshire no building is allowed to be erected the plans and elevations of which have not been approved by his advisory architect, great stress being laid on the suitability of materials. He had drawn up certain minimum conditions to be imposed on builders, which included a veto on yellow bricks and purple slates, sham half-timbered work, and coloured glass in windows.

After Lady Leverhulme had presented the prizes Sir Giles Scott, in proposing a vote of thanks to Lord Leverhulme, referred to the very great services to architecture which he and his father before him had rendered. He said that the fact that the Architectural Association School was run by practising architects renders it unique among the architectural schools of the country and gives it many advantages over academic training.

Mr. Howard Robertson (Director and Principal), seconding the vote of thanks, spoke of the debt of gratitude the staff of the school felt to Lord Leverhulme on account of the Leverhulme Scholarships. In thanking Lady Leverhulme for coming to distribute the prizes Mr. Robertson spoke of the place of lady architects in the profession. Although he didn't want to encourage lady architects he had to admit that they were very good workers, and extremely good to have in offices—not cheaper than men but just as good. He suggested that next year they might have a design programme based entirely on the banned materials on Lord Leverhulme's list, with a result which should certainly contribute to the cause of the preservation of rural England. In conclusion he said that he always felt a little sad at this time of year because so many students left the school. The pleasure of teaching there, he said, was entirely due to the spirit of the students, and he added that the reason for so many of the staff leaving to go into private practice was that they learnt so much from the students.

THE LEEDS SCHOOL

The first annual exhibition of students' work by the Leeds School was opened by Mr. A. C. Bossom, M.P. [*F.*] on 17 July. In former years the exhibition has been part of the College of Art Exhibition, which is held in November, but this has meant that it has been possible to show only a very limited selection of the work of the School itself. This year the largest room in the Leeds Art Gallery has been loaned for the purpose, and over three hundred drawings and a number of models were on view.

Before declaring the exhibition open Mr. Bossom gave an address to a crowded audience representing the civic, educational and business interests of the city. He pointed out the great need for rebuilding in this country, and estimated that from one-quarter to one-third of our buildings were out of date, these including not only houses but office and factory buildings and railway stations. Mr. Bossom urged the adoption of new methods and machinery which would reduce the cost of building.

The speaker declared that the successful architect of to-morrow would be not only a designer, but would also be an expert in materials and an organiser; he would be no mere passive critic of official town planning but an active pioneer leading and educating his fellow citizens. He showed that the work of the architect is of the utmost value to the State, and urged the students to make sure that they were qualified to fulfil their part.

The exhibition, which has created considerable interest with the public and with the Press, is well arranged with simple lettering indicating the various sections. The theses presented by fifth-year students for the Diploma in Architecture contain designs for buildings suitable for actual sites in Yorkshire. These include such diverse subjects as a cathedral for Bradford, a tenement block for Leeds, a new hotel for Scarborough and an airport for Hull. The value of the thesis which places the responsibility for research on the individual student can hardly be over-estimated. Other work of particular interest in the exhibition shows a design for a small house to cost £900. This is the work of the fourth year, who were required to submit a model, a careful estimate of cost and a complete specification for all trades. Another fascinating model shows a dairy farm designed by a third-year student.

The policy of the school is well shown in the exhibition, the drawings and other evidence indicating that although every opportunity is given for imaginative design, the student is encouraged to take a keen interest in the construction of actual buildings, in building mechanics and in the preparation of working and other drawings which are essential parts of the process of converting an idea into a real and successful building.

The exhibition marks the end of the school year, which has been a memorable one in the history of the school, since the recognition by the Town Planning Institute of the newly-formed course leading to the Diploma in Town and Country Planning makes the school the only one of its particular kind to be fully recognised by both the architectural and town planning professions.

Examination Results and Probationers

THE FINAL EXAMINATION
JULY 1934

The Final Examination qualifying for candidature as Associate R.I.B.A. was held in London and Edinburgh from 4 to 12 July 1934.

Of the 205 candidates examined, 81 passed (29 in Part 1 only) and 124 were relegated.

The successful candidates are as follows:—

Aitken, James Moffat (*Part 1 only*).
Allport, Charles Henry William.
Beech, George Henry (*Part 1 only*).
Beesley, William Henry
Billington, Percy.
Boothroyd, Eric.
Boreham, Cyril Ernest Walter.
Broadwater, Herbert James William (*Part 1 only*).
Brown: George Henry (*Part 1 only*).
Cardew, George Edwin (*Part 1 only*).
Casson, Hugh Maxwell.
Charles, Gordon Victor.
Clarke, Eric.
Clayton, Thomas Hilton.
Collins, Edwin Wilfred.
Collver, Charles Edwin (*Part 1 only*).
Cooper, Ernest Colin (*Part 1 only*).
Cortis, Herbert William.
Crichton, Charles McVeagh.
Dewing, Frank Martin.
Doctor, Bhicaji Edulji.
Dumble, Alan (*Part 1 only*).
Dungey, William John Hugh (*Part 1 only*).
Fedeski, Henry.
Fermaud, Laurence Hayward Auguste.
Forbes, John (*Part 1 only*).
Gardiner, Harold Stanley.
Gick, Margaret Cecily.
Grace, John (*Part 1 only*).
Gray, Andrew Leslie.
Greenwood, John Wilmot (*Part 1 only*).
Grigg, Leslie James.
Hackett, Brian.
Hannam, Francis Lambson (*Part 1 only*).
Hardcastle, Albert John.
Harkness, Euan William.
Hart, Cyril Archer (*Part 1 only*).
Henry, George Austyn.
Hurry, Wilfred Roy (*Part 1 only*).
Ingham, Wilfred.
Jobson, William John (*Part 1 only*).
Knight, Thomas William (*Part 1 only*).
Lanchester, Henry Robert (*Distinction in Thesis*).
Lyons, Edward Douglas (*Part 1 only*).
Macaree, Henry Charles (*Part 1 only*).
Macfarlane, Arnold Aiken.
Mackay, Eric Keith.
Mackenzie, James George (*Part 1 only*).
Mackley, Horace.
Marks, Lindon.
Marsden, William.
Marston, Frank.
Mayman, Leslie Gilpin.
Ménage, Frederick Charles (*Part 1 only*).
Morgan, John Loring.
Morris, Alfred Sidney (*Part 1 only*).
Negus, Percy George.
Nicholls, Ralph George (*Part 1 only*).
Pascoe, Arnold Paul.
Penman, Leslie Roland.
Pike, Charles Henry.
Pilkington, Thomas (*Part 1 only*).
Pollard, George Walter (*Part 1 only*).
Pyne, Albert Sidney.
Reeve, Cecil Edward.
Roth, Daniel.
Runnicles, Cyril George.
Sharman, Reginald Percy (*Part 1 only*).
Sherwin, Robert White.
Smeeton, Reginald Arthur.
Smith, John Francis George.
Smithson, George Hugh.
Spence, Charles Clibborn.
Stedman, James Spedan (*Part 1 only*).
Thorpe, Jack Lester.
Watson, Adam.
Watt, James Sinclair.
Westcott, John Shorland.
Weston, Norman Ernest Godfrey (*Part 1 only*).
Williams, Arthur Charles (*Part 1 only*).
Williams, Geoffrey Lawrence.

THE SPECIAL FINAL EXAMINATION

The Special Final Examination qualifying for candidature as Associate R.I.B.A. was held in London from 4 to 10 July and in Edinburgh from 4 to 12 July 1934.

Of the 28 candidates examined, 12 passed (2 in Part 1 only) and 16 were relegated.

The successful candidates are as follows:—

Culling, Percival Edwards.
Dron, Robert.
Goligher, Samuel George.
Lemmon, Cyril Whitefield.
Metayers, Henry Alfred (*Part 1 only*).
Nightingale, Harold.
Stirrup, Norman (*Part 1 only*).
Thomas, Vivian David Lloyd.
Thurgood, Cyril James Longden
Walton, Eric Bell.
Wolff, Wilhelm Eugen.
Wylde, Cecil Irton.

SPECIAL EXAMINATION IN DESIGN FOR FORMER MEMBERS OF THE SOCIETY OF ARCHITECTS.

The Special Examination in Design for former Members of the Society of Architects qualifying for candidature as Associate R.I.B.A. was held in London from 4 to 9 July 1934.

One candidate was examined and passed

The successful candidate was:—

Bawcutt: John Charles Harry

THE EXAMINATION IN PROFESSIONAL PRACTICE FOR STUDENTS OF SCHOOLS OF ARCHITECTURE RECOGNISED FOR EXEMPTION FROM THE R.I.B.A. FINAL EXAMINATION

The Examination was held in London and Edinburgh on 10 and 12 July 1934. Of the 33 candidates examined 30 passed and 3 were relegated.

The successful candidates are as follows:—

Barton, Thomas William.
Campbell, John.
Coton, Thomas James.
Coull, James Findlay.
Dickinson, Ralph.
Dixon, Reginald Norman.
Evans, Joseph Hubert.
Gardner, Martin.
Gooding, John Francis Rowland.
Harrison, John William Osborn.
Hayes, Louis.
Hill, Leslie Howard.
Johnson, William Frederick.
Lake, Herbert John.
McManus. Philip Edward Joseph.
Marvan, Francis Harold.
Morton, Robert Scott.
Neilson, Angus Moncur.
Paterson, Robert Wallace.
Percy, Charles Geoffrey.
Reiach, Alan.
Robertson, James.
Round, Harold Geoffrey.
Sherwell. Eileen May.
Smeall, Elizabeth Margaret.
Smith, George Alexander Nuttall.
Smith, Rosemary Owen.
Thompson, Patrick McGowan.
Thomson, William Innes.
Varcoe, Alexander Wentworth.

THE R.I.B.A. INTERMEDIATE EXAMINATION
JUNE 1934

The R.I.B.A. Intermediate Examination qualifying for election as Student R.I.B.A. was held in London, Belfast, Hull. Manchester, Newcastle-upon-Tyne and Plymouth, from 1 to 7 June 1934.

Of the 207 candidates examined 68 passed and 139 were relegated. The successful candidates are as follows:—

Alden (Miss) Muriel.
Archer, Bertram Stuart Trevelyan.
Arnfield, Sherratt Martin.
Barber, Anthony Gerald.
Barker, William.
Baxter, Denis.
Biddulph, Dennis Sydney Golden.
Broadbent, Ronald.
Bromley, Geoffrey Owen.
Brook, Mark Heaton.
Broughton, Eric Geoffrey.
Brown, Alan George.
Carver, Owen Philip.
Chadwick, Herbert Leslie Hulme.
Collins, Eric Victor.
Collis, Russell Edwin.
Cook, Maurice Henry Arthur.
Corbishley, William Shallcross.
Craddock, Frederick David.
Davison, John George.
Doody, Cyril Herbert.
Drinkwater, Norman.
Elwood, Sidney Leonard.
Flint, John Brentnall.
Fowler, Norman Harold.
Gibson, Percy Albert.
Gilby, Daniel.
Green, James Dudley.
Greenwood, Colin Prince.
Griffiths, Jack.
Hagger, Burt James Leslie.
Hammond, Leonard Holmes.
Hill, Gwenith Waldo.
Jackson, Stanley John Herbert.
Kenyon, Horace Goodall.
Levy, Eric.
Long, Edward George.
Low, Alick.
Luxton, Horace Newcombe.
Macintosh, Laurence Alan.
Martindale, Christopher Bernard.
Morris, John Charles.
Murphy, Joseph William.
Peters, John Stuart.
Prescott, William Alan.
Price, Philip Roger.
Raw, Kenneth Malcolm.
Ray, Gilbert.
Redfern, Ewart Brindley.
Rider, Norman Terence.
Rixon, John Austin.
Sage, Howard Wilfred Mortimer
Sellers, Marcel Albert John.
Shallis, Alfred Charles.
Smith, Walter.
Smyth, William Granville.
Squire, Raglan Hugh Anstruther.
Stamp, David.
Thompson, Alan.
Tuffley, Henry Guy.
Viney, Thomas Leslie.
Ward, Norman Walter.
Watson, James Fletcher.
Whittle, James Murray.
Wicker, Frank Albert.
Wright, Roland Keith.
Young, Leslie Radford.
Young, Richard Arthur.

5 July 1934.

R.I.B.A. PROBATIONERS

During the month of June 1934 the following were registered as Probationers of the Royal Institute:—

ABERCROMBY: ALEXANDER WEBB, 8 Soroba Park Terrace, Oban.
ANDREWS: RONALD ARTHUR, 34 Linden Avenue, Darlington.
ARCHIBALD: WILLIAM DIXON, West Moors, Thackeray Grove, Middlesbrough, Yorks.
ARSCHAVIR: ARTHUR, 35 Moorland Road, Didsbury, Manchester.
BAKER: GILBERT CAMPBELL, 168 Bristol Road, Birmingham, 5.
BARR: ALBERT WILLIAM CLEEVE, 16 Statton Road, Liverpool, 13.
BEATSON: RONALD GUTHRIE SENIOR, 19 Ewen Street, Takapura, Auckland, N.2, New Zealand.
BIRD: KENNETH JOHN, at 53 Surrey Street, Norwich.
BROWN: JAMES CHARLES, 14 Railway Terrace, Rugby.
BUCK: ERNEST LEONARD, Olive Dene, Outwell, nr. Wisbech, Cambs.
CATTERALL: STANLEY ERNEST, 36 North Drive, St. Annes-on-the-Sea.
DAVIS: PHILLA BARBARA, Hill Cottage, Church Stretton, Salop.
DOBSON: ARTHUR IRVING, 1 Delbar Cottages, St. Mawes, Cornwall.
DRAKE: WILLIAM HAROLD, 20 Bath Road, Southsea, Hants.
EVE: RAYMOND PERCY SUTCLIFF, Manor House, Manor Road, Cheam, Surrey.
EYRES: NORMAN, "White Lodge Parnes," Lane, Pinner, Middlesex,
FELLOWS: BENJAMIN HERBERT, "Arden House," Finongley, nr. Coventry.
GARTH: WILLIAM ALFRED, 68 Horley Road, Catford, S.E. 6.
GILES: MALCOLM JOHN, Ivinghoe, Dorking.
GILL: JOHN COLMAN, Dromore, Blundell Road, Hightown, nr. Liverpool.
GRIFFIN: ALEC GEORGE, 76 Canterbury Grove, West Norwood, S.E.27.
GRIFFITHS: JOHN MORGAN GORDON, Hope and Anchor Hotel, Goodwick, Pembrokeshire.
HART: KENNETH, 4 High Street, Bridlington.
HATCH: LEONARD ARTHUR, Oak Tree Farm, Theale, Wedmore, Somerset.
HAYES: THOMAS RALPH, 11 Oakfield Road, West Bridgford, Nottingham.
HENDRIKZ: WILLEM DE SANDERES, Vernon House, Park Place, S.W.1.
HIPWELL: GEORGE RAYMOND, 2 Eakring Road, Bilsthorpe, Notts.
HOWORTH: JOHN FRANCIS, Apsley House, nr. Whitchurch, Hants.
ILES: Denise Elizabeth, Hill Crest, Savile Town, Dewsbury, Yorks.
INNES: EDWIN HARROP, 15 Thirlestane Lane, Edinburgh.
JAFFREY: GEORGE, 545 Clifton Road, Aberdeen.
JARVIS: FRANK ANTHONY, West Common Cottage, Harpenden.
JENKIN: DAVID CYNDDYLAN HUGHES, 97 Jersey Road, Osterley, Hounslow, Middlesex.
JONES: RONALD NORMAN, 6 Wellington Road, Oxton, Birkenhead.
KABERRY: JOHN, 40 King's Road, Rochdale, Lancashire.
KENYON: JOHN CHRISTOPHER, 44 Church Street, Padiham, Burnley, Lancs.
KING: THOMAS EDWARD JAMES, 12 Richmond Road, Exeter.
KNIGHT: HAROLD ALBERT, 75 Shirley Avenue, Shirley, Southampton.
LAKER: ROBERT ALEXANDER, 8 North Road, Walthamstow, E.17.
MCDONNELL: EDMOND GEORGE, Liverpool School of Architecture, The University, Liverpool.
MCFADYEN: JAMES SAMUEL, Barclays Bank (D. C. and O.), 111 St. Martin's Lane, Trafalgar Square, W.C.2.
MANBY: ROY MARTIN, 19 Edenfield Road, Liverpool, 15.
MUNDY: WILLIAM JAMES, 38A High Street, Mosborough, nr. Sheffield.
NEEL: GEORGE EDRIC, 11 Thurlow Road, London, N.W.3.
NIGHTINGALE: PAUL FORSTER, Riverdale, Halling, Kent.
NOBLE: JOHN BAILLIE, 28 Crown Drive, Inverness..
O'HARA: FRANCIS, 59 Gilmore Place, Edinburgh.
PAUL: LYON BALFOUR, Cakemuir, Tynehead, Midlothian.
PENSON: JOHN, 8 Waterworks Road, Worcester.
PITCHFORD: ROY, 14 Clyther Square, Newport, Mon.
PRESSWELL: PAUL TREVOR, Gothic House, Fore Street, Totnes, Devon.
QUILLIAM: GEORGE CAMPBELL, 5 Micklefield Road, Liverpool, 15.
RAVEN: ARTHUR LIONAL BOULTBEE, Gladstone House, Rodney Street, Liverpool.
SILCOCK: RAYMOND, 3 Charlbury Gardens, Seven Kings, Ilford, Essex.
SMALE: SYDNEY EVAN, 2 St. David's Road, East London, C.P., South Africa.
SMART: ALLEN, 41 Horseley Heath, Tipton, Staffs.
SYMES: JOHN JEFFERY, 73 Jeffrey's Road, Clapham, S.W.4.
WALKER: NEVIL GOWAN WEYBOURNE, 3 Holbeck Avenue, Scarborough, Yorks.
WHITE: HARRY HARMSON, 8 The Green, Acomb, Yorks.
WHITEHEAD: MARY SUZANNE THERESE, 2 Albert Court, London, S.W.7.
WILLS: ALFRED WINCHESTER, 53 Woodville Road, Torquay.
WILLIAMS: ALFRED EDWARD, 7 East India Flats, Lower North Street, Poplar, E.14.
WILLIAMS: JOHN LESLIE MAXWELL, Cowley Hall, South Darley, nr. Matlock, Derbyshire.

Notices

THE R.I.B.A. KALENDAR 1934-35

The attention of members is drawn to the leaflet enclosed with the JOURNAL issued on 23 June. Changes of address, etc., for inclusion in the forthcoming issue of the Kalendar must be notified to the Secretary, R.I.B.A., BEFORE SATURDAY, 1 SEPTEMBER.

COMPETITIONS

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice, in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

THE R.I.B.A. REGISTER OF ASSISTANTS SEEKING ENGAGEMENTS

Members and Students of the R.I.B.A. and the Allied and Associated Societies are reminded that a Register of Assistants seeking engagements is kept at the offices of the Royal Institute.

An assistant seeking employment should obtain from the Secretary R.I.B.A. the necessary form (to be filled up in duplicate) on which particulars must be given as to the applicant's age, qualifications, salary required, references, etc.

The application will hold good for one month from the date of receipt, after which it must be renewed unless the applicant has meanwhile obtained employment.

Architects, whether members of the R.I.B.A. or not, will be furnished on application with the names and addresses of persons desiring employment as assistants, improvers or clerks of works as the case may be. Architects applying for assistants should give the following particulars of their requirements: (1) whether temporary or permanent engagement; (2) junior or senior assistants; (3) particulars of duties and style of work; (4) salary offered.

REJECTION OF ARCHITECTS' DESIGNS BY LOCAL AUTHORITIES

Under the 1932 Town and Country Planning Act, Local Authorities have power to reject elevations which they consider are harmful to the amenities of the neighbourhood.

Many Local Authorities have consulted the Panel of Architects set up by the C.P.R.E. and the R.I.B.A. in connection with the elevations of buildings. There have been instances, however, where Councils, without a skilled Adviser, have rejected the plans of qualified Architects on æsthetic grounds.

Members of the Institute who have had plans rejected in this way are asked to notify the Secretary.

OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

BUILDING SURVEYING EXAMINATIONS

The R.I.B.A. Statutory Examination qualifying for candidature as District Surveyor in London, and the R.I.B.A. Examination qualifying for a candidature as Building Surveyor under Local Authorities, will be held at the R.I.B.A. on 10, 11 and 12 October 1934.

Applications for admission to either examination must be made not later than 19 September 1934, on the prescribed form to be obtained from the Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

Competitions

COMPETITION FOR PROPOSED NEW COUNCIL OFFICES, MARKET BOSWORTH

The Competitions Committee desire to call the attention of Members to the fact that the Conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members should not take part in the competition.

NEW MILLS U.D.C. HOUSING LAY-OUT COMPETITION

Members of the Royal Institute of British Architects and of its Allied Societies must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

BELFAST: MEMORIAL ASSEMBLY HALL

The Governors of Methodist College, Belfast, invite architects resident in Ireland to submit in competition designs for a new Memorial Assembly Hall in the grounds of the Methodist College.

Assessor: Mr. R. S. Wilshere [*F.*].
Premiums: £100 and £50.
Last day for questions: 2 July 1934.
Last day for receiving designs: 31 August 1934.

SWINDON: PROPOSED TOWN HALL EXTENSION

The Town Council of Swindon propose to hold a competition for Extensions to the present Town Hall, and Mr. A. B. Knapp-Fisher [*F.*] has been appointed by the President of the R.I.B.A. to act as Assessor. Conditions have not yet been drawn up.

SWINTON AND PENDLEBURY: NEW MUNICIPAL OFFICES

The Swinton and Pendlebury Urban District Council invite architects of British nationality to submit in competition designs for new Municipal Offices.

Assessor: Mr. James R. Adamson [*F.*].
Premiums: £150, £100 and £75.
Last day for questions: 11 June 1934.
Last day for receiving designs: 17 August 1934.

TUNBRIDGE WELLS: NEW CIVIC CENTRE

The Corporation of the Borough of Royal Tunbridge Wells invite architects to submit in open competition designs for a new Civic Centre to be erected on a site in Calverley Parade. The units comprising the scheme are as follows :—

(*a*) Council suite and Municipal Offices.
(*b*) Assembly Hall.
(*c*) Police Station and Police Court.
(*d*) Fire Brigade Station.
(*e*) Public Library and Municipal Museum.

Assessor: Mr. E. Berry Webber [*A.*].
Premiums: £300, £200, £100 and £75.
Last day for questions: 6 July 1934.
Last day for receiving designs: 22 September 1934.

WOLVERHAMPTON: MUNICIPAL ASSEMBLY HALLS

The Corporation of Wolverhampton invite architects of British nationality, resident in the British Isles, to submit in competition designs for new Municipal Assembly Halls.

Assessor: Mr. C. Cowles-Voysey [*F.*].
Premiums: £350, £250 and £150.
Last day for questions: 21 May 1934.
Last day for receiving designs: 1 October 1934.

STOKE NEWINGTON: FLATS

The Stoke Newington Borough Council have invited six firms of architects to submit in competition designs for the erection of 74 flats on the Glebe Place site.

Assessor: Mr. Robert Lowry [*F.*].

COMPETITION RESULTS

DUDLEY: COUNCIL SCHOOL

1. Messrs S. N. Cooke [*F.*] and W. N. Twist [*F.*].
2. ,, Cherrington and Stainton [*FF.*].
3. ,, Nicol and Nicol and Thomas [*A.*].

"THE BUILDER" "IDEAL VILLAGE" COMPETITION

1. Mr. Charles P. Meddick.
2. Mr. H. H. Powell [*A.*].
3. Mr. H. Heathman [*L.*] and Miss E. D. Blacker.

GIDEA PARK MODERN HOMES EXHIBITION

The results of this competition by the agency of which 35 houses have been built for the Modern Homes Exhibition at Gidea Park have been announced.

The 25 distinct designs (10 houses are semi-detached) have been divided into five classes, according to the cost, and the first prize in each class has been awarded as follows:—

"A" (Semi-detached), Mr. J. R. Moore Simpson [*A.*].
"B" (Semi-detached), Messrs. Scott, Chesterton and Shepherd [*A.F. and A.*].
"C" Mr. J. R. Moore Simpson [*A.*].
"D" Mr. L. W. Thornton White [*A.*].
"E" Messrs. Skinner and Tecton [*A.A.*].

Members' Column

NEW PARTNERSHIPS

WILLIAM AND EDWARD HUNT have taken into partnership Mr. James Henry Greenwood [*A.*], their chief assistant, who has been with the firm for fifteen years. The style of the firm will remain as William and Edward Hunt.

MR. A. R. F. ANDERSON [*A.*] has changed his address to 7 New Square, Lincoln's Inn, W.C.2 (Holborn 1797), the name of the firm now being Anderson, Forster, Warren and Wilcox.

OFFICES TO LET

ASSOCIATE has offices to let within four doors of Bedford Square. Three rooms ground floor, two rooms first floor, one room second floor. Lease 5½ years. Rent from £60 a room, payable quarterly in advance. Reasonable offer for any floor will be considered.—Box No. 3074, c/o Secretary R.I.B.A.

SHARE OF OFFICES

MEMBER occupying offices in the West End is willing to share with another practising architect requiring London office.—Box No. 2374, c/o Secretary R.I.B.A.

Architects' Benevolent Society

PENSION AND FAMILY PROVISION SCHEME FOR ARCHITECTS

The provision of an adequate pension when working days are over has been a matter of grave concern to the professional man since interest rates on gilt-edged and other safe stocks have fallen with no immediate prospect of recovery. There was a time when a few thousand pounds meant comfort, but those days have gone, and the scheme of pension and family insurance outlined below makes its appearance at a most opportune moment.

The scheme has been formulated by the Insurance Committee of the Architects' Benevolent Society and is available to all members of the R.I.B.A. and its Allied and Associated Societies. An adequate pension can be secured, fixed in amount, and in every way guaranteed, together with the benefit of a widow's pension, payable for life and similarly guaranteed, if the member does not reach retirement age.

The scheme is designed on the broadest lines and the member without dependants may take advantage of the pension benefit alone or the pension can be commuted for a cash sum if desired.

BENEFITS UNDER THE SCHEME

The benefits under the scheme include:—

(1) A Member's Pension, which may be effected for units of £50 per annum, payable monthly and commencing on attainment of the anniversary of entry nearest to age 65. This pension is guaranteed over a minimum period of five years and payable thereafter for the remainder of life.

(2) The Beneficiary's Pension, payable as from the anniversary mentioned in Benefit No. 1, but to the widow (or other nominated beneficiary) if the member dies before age 65. The amount of this pension is adjusted in accordance with the disparity between the ages of the member and his wife.

(3) Family Provision. Under this benefit a payment of £50 yearly is made to the dependant from the date of death of the member prior to age 65 until attainment of the anniversary previously mentioned, after which Benefit No. 2 becomes available.

Provision can be made for any number of units (of £50 per annum) up to a maximum of £500 per annum.

By adopting a scheme which is limited to members of the architectural profession, the Committee has been able to secure more advantageous terms than would be obtainable by members individually.

Members are entitled to claim rebate of Income Tax on their periodical contributions to the scheme both in respect of pension and of family provision benefit.

Full particulars of the scheme will be sent on application to the Secretary, A.B.S. Insurance Department, 9 Conduit Street, W.1.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

R.I.B.A. JOURNAL

DATES OF PUBLICATION.—1934.—8 September; 13 October.

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